

C. 4461 (1) BATLEY



BOROUGH OF BATLEY.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

for the Year 1930.

G. H. PEARCE, M.D. (Durh.), D.P.H. (Camb.),
Of the Inner Temple, Barrister-at-Law.

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This Annual Report is compiled in accordance with the requirements of Circular 1119 (England), issued by the Ministry of Health, June 18th, 1930.

General Statistics, 1930.

Area of Borough (in acres)	3,227
Civil Population (Registrar-General's Estimate)	34,550
Population at Census of 1921 (Males 16,647, Females 19,490)	36,137
Number of Inhabited Houses (1921)	9,509
Total Private Families at Census (1921)	9,320
Population living more than two persons per room (Census)	18.8%
Number of inhabited houses, 1930 (according to Rate-books)	9,925
Average number of persons per house	3.6
Density of population per acre	10.7
Number of Births (Males 263, Females 236) Total	499
Illegitimate Births (Males 10, Females 10) Total	20
Birth-Rate per 1,000 living	14.4
Number of Still Births Registered	34
Illegitimate Birth-Rate per 1,000 Births Registered	40.08
Number of Deaths, including Residents, who died away from Batley (Males 201, Females 232) Total	433
Net Death-Rate per 1,000 living	12.5
Infantile Death-Rate per 1,000 Births Registered	60.0
Illegitimate Death-Rate per 1,000 Births Registered	100.0
Tuberculosis Death-Rate (all forms), per 1,000	0.43
Phthisis Death-Rate per 1,000	0.37
Zymotic Death-Rate per 1,000	0.17
Respiratory Diseases Death-Rate per 1,000 (excluding Phthisis)	1.4
Cancer Death-Rate per 1,000	1.6
Cases of Infectious Disease notified	238
Cases of Pulmonary Tuberculosis notified	27
Cases of other forms of Tuberculosis notified	7
Number of Inquests	33
Rateable Value	£152,710
Rate of 1d. in the £ produces Estimated	£540
Rainfall in Inches	32.48
Number of Wet Days	190
Parliamentary Voters	23,895
Local Government Voters	17,508
Poor Law Relief Distributed	£6,218 3 3
Primary Vaccinations, exclusive of Smallpox Contacts	113
Exemption Certificates Granted	378
Dried Milk given under Milk (Mothers and Children) Order 2,933 lbs. Cost	£211 3 6
Infants Born during 1930 fed wholly or partially from Public Funds	8.2%



**Borough of Batley.—Vital Statistics of Whole District
during 1930 and Previous Years.**

Yearly Average	Estimated Population.	NETT BIRTHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
				Under 1 Year of Age.		At all Ages.	
		Number	Rate per 1,000	Number	Rate per 1,000 Nett Births	Number.	Rate. per 1,000
10 years 1901-10	31,694	827	26.1	143	171	537	17.0
10 years 1911-20	36,435	676	20.5	93	123	571	16.0
10 years 1921-30	35,765	624	17.3	48	76.5	482	13.4
Year 1930	* 34,550	499	14.4	30	60.0	433	12.5
England & Wales ...		...	16.3	...	60	...	11.5
107 County Bor- oughs and Great Towns including London (on 1929 est. population)		...	16.7	...	64	...	11.5
159 Smaller Towns (on 1929 est. pop.)...		...	16.2	...	55	...	10.5
LONDON (1929 est. population)		...	15.7	...	59	...	11.4

*1929 figure. Registrar-General's estimate for 1930 will not be published before the end of June, 1931.

	Total.	M.	F.		
Live Births—Legitimate	479	253	226	Birth Rate ...	14.4
Illegitimate	20	10	10		
Still Births	34	15	19	Rate per 1000 total births...	68.1
Deaths	433	201	232	Death Rate ...	12.5
Percentage of total deaths occurring in public institutions					24.0
Number of women dying in, or in consequence of childbirth:—					
From sepsis					Nil.
From other causes					3
Death rate of infants under one year of age per 1,000 live births:—					
Legitimate ...	56.0.	Illegitimate ...	4.0.	Total ...	60
Deaths from Measles (all ages)					Nil.
Deaths from Whooping Cough (all ages)					Nil.
Deaths from Diarrhoea (under 2 years of age)					Nil.
There has been no unusual or excessive mortality during the year.					

**Causes of Death in Batley for the Years
1912 to 1930.**

	10 Years Average, 1912-1921.	5 Years Average, 1922-1926.	Year 1927.	Year 1928.	Year 1929	Year 1930.
Enteric Fever	2.3	1.2	1	...	2	2
Small Pox	0.1	...	...	...	...	...
Measles	11.5	4.6	10	...	3	...
Scarlet Fever	1.0	1.0	...	1	1	...
Whooping Cough	5.9	4.8	2	5	4	...
Diphtheria and Croup ...	7.1	1.0	1	...	1	4
Influenza	27.6	20.8	18	9	31	1
Encephalitis Lethargica ...	...	0.2	1	1	1	...
Meningococcal Meningitis	...	0.4	...	...	...	...
Tuberculosis of Respira- tory System	31.9	16.6	14	13	19	13
Other Tuberculous Diseases	11.8	9.4	9	8	6	2
Cancer, Malignant Disease	42.9	47.4	55	55	62	57
Rheumatic Fever	2.6	2.8	2	1	2	1
Diabetes	0.2	5.8	6	6	10	13
Cerebral Hæmorrhage, etc.	4.4	42.0	43	28	33	31
Heart Disease	57.4	72.2	71	74	96	90
Arterio-Sclerosis	1.8	25.0	33	32	30	32
Bronchitis	51.0	51.6	57	29	53	27
Pneumonia (all forms) ...	40.1	33.0	50	30	46	22
Other Respiratory Diseases	6.0	7.0	5	...	3	1
Ulcer of Stomach or Duo- denum	0.4	5.0	2	1	3	4
Diarrhoea, &c (under 2 yrs.)	12.3	3.0	1	4	3	...
Appendicitis and Typhlitis	2.6	2.6	2	2	3	3
Cirrhosis of Liver	1.9	0.2	...	1	...	1
Acute & Chronic Nephritis	25.3	16.2	24	18	21	26
Puerperal Sepsis	1.1	0.6	...	1	...	...
Other Accidents & Diseases of Pregnancy & Parturi- tion	3.4	2.6	5	1	2	3
Congenital Debility and Malformation, Premature Birth	34.9	22.8	23	18	24	22
Suicide	3.3	3.2	3	6	8	5
Other deaths from violence	12.6	10.8	2	22	9	10
Other Defined Diseases ...	148.4	70.0	85	68	78	63
Diseases ill defined or un- known	0.8	0.8	...	...	...	...

SOCIAL CONDITIONS.—During normal times the trade of Batley was principally textile, with some coal mining. More women than men were employed in textiles, according to the census returns. Latterly, owing to the decline in trade, certain mills have closed and many mines have ceased work. Some mills have become rag warehouses. At the close of the year 1930, according to figures published in the local press, there were 5,259 persons on the “live” register at the Batley Employment Exchange, an increase of 197 compared with the previous week. The total included 2,961 men and 2,279 women, and of these numbers 1,050 men and 1,243 women were known to be working short time.

During 1930 the following funds, amongst others, have been in operation for the relief of any distress in the town, apart from private charity:—

Unemployment Pay ; National Health Insurance ; Old Age Pensions ; Widows’ Pensions ; War Pensions ; Public Assistance Committee ; Children at the Open Air School ; Batley Christmas Dole ; Mayor’s Boot Fund ; Church Poor Funds ; British Legion ; Club Charity Funds ; Batley Town Mission ; Meals and Cod Liver Oil to School Children ; Dried Milk, etc., from the Health Committee ; Clothing for infants and young children through the Infants’ Welfare Centres ; Local Charity (Jessops, etc.) ; “Yorkshire Evening Post” (109 Christmas hampers) ; anonymous donor 109 parcels of groceries value 5/- each ; Coalfields Distress Fund.

The Coalfields Distress Fund was closed in July, 1930. Particulars are furnished in last year’s report respecting its operations and the classes who benefited thereby, the majority being employed elsewhere than in the mines.

During 1930, £1,038 11s. 6d. was distributed from this fund, and a special emergency fund instituted, with a capital of £250.

Relief from the Poor Law Guardians, and their successors, the Public Assistance Committee, has been distributed during recent years as follows:—

1919— £3,466 7 1	1923— £6,908 2 5	1927— £7,211 6 10
1920— £3,574 8 4	1924— £5,752 0 5	1928— £4,405 9 6
1921— £12,206 5 9	1925— £7,810 14 2	1929— £6,312 9 2
1922— £8,640 13 3	1926— £13,094 13 8	1930— £6,218 3 3

It must not be assumed from the above remarks that Batley is a town where poverty is present to such a degree as to make it doubtful whether many persons are actually in need of food. Careful observation of scholars over several years has failed to discover any child who suffers from starvation. There are cases of malnutrition (apart from disease) due to careless feeding where

mothers will not go to the trouble of cooking nourishing meals at small cost. Every girl in Batley who has attended an elementary school during the last ten years has received instruction in home-making and cookery as part of her education. It follows, therefore, that the younger generation of Batley mothers cannot plead ignorance of cookery. In addition the Health Visitors, as part of their routine duties, are continuously in the homes giving advice on food values from the nutritive and financial standpoints. It is well understood that, generally speaking, the most expensive food contains the least nourishment. During recent years the Maternity and Child Welfare Committee has provided the following amounts of dried milk free of charge to expectant and nursing mothers and children under the age of three years:—

1919	976 lbs. costing	£94 11 4
1920	241 lbs. ,,	£27 0 10
1921	3060 lbs. ,,	£328 16 6
1922	3437 lbs. ,,	£325 17 0
1923	1136 lbs. ,,	£94 13 8
1924	428 lbs. ,,	£32 2 0
1925	746 lbs. ,,	£51 16 4
1926	2145 lbs. ,,	£140 19 10
1927	815 lbs. ,,	£57 8 10
1928	1010 lbs. ,,	£71 16 10
1929	2192 lbs. ,,	£158 15 5
1930	2933 lbs. ,,	£211 3 6

During 1930 the number of infants born in Batley and fed wholly or partially from public funds amounted to 8.2% of the total births notified. The figure for 1929 was 9%. The Education Committee provided for school children 3,044 free meals. When compared with neighbouring towns it would appear there is considerable advantage to those affected through being Batley residents.

POPULATION.—As the Census will be taken in 1931 the figure furnished by the Registrar-General for the calculation of vital statistics is 34,550, which is the population figure given by him for the middle of 1929 and has been used for the calculation of the 1930 figures, as it was for those of 1929. The Registrar-General states the figure for 1930 will not be available before the end of June next.

BIRTHS.

NOTIFICATION OF BIRTHS ACT, 1907.—Doctors notified 153, midwives 399, and other persons 8 births, a total of 560 during 1930. Of these 29 were still births.



The Registrar-General reports the registration—which is distinct from notification—of 499 births in Batley during 1930. This appears to be the lowest actual number of births ever registered in Batley so far as can be obtained from the records. There were 34 still births registered in addition to the live births.

The nett birth rate for Batley is 14.4 per thousand of population, which is the lowest birth-rate ever registered in the town and is below that for England and Wales, the County Boroughs, the smaller towns, or London.

INFANTILE DEATH RATE.—This is 60 per thousand of the births registered, which is the same figure as for England and Wales, is lower than the County Boroughs (64), but higher than the Smaller Towns (55) and London (59). In 1928 the rate for Batley was 55 per 1,000 births registered, but with that exception 60 is the lowest infant death rate ever recorded in the town.

It is regrettable to find that no less than 22 infants only survived their birth for a short period, the causes of death being due to congenital debility and malformation, premature birth, etc. Whilst the great improvement in this death rate is a testimony to the value of the Maternity and Child Welfare work done in the town, it points out the great need for the Ante-Natal Clinic and the advice given there.

GENERAL DEATH RATE is 12.5 per thousand of the population, which, for an industrial town of this nature, compares not unfavourably with others, although it is higher than England and Wales (11.5), the County Boroughs (11.5), the Smaller Towns (10.5) and London (11.4). Attention is directed to the several preceding tables, which shew the position since 1901.

CANCER DEATH RATE.—The following table gives figures during the last 22 years. Whilst much research work is being done, both locally by the Yorkshire Council British Empire Cancer Campaign and throughout the world, the cause of the disease has not yet been discovered, but certain progress has been made respecting methods of treatment, particularly by radium.

Year	No. Deaths	Rate per 1,000 of population	Year	No. Deaths	Rate per 1,000 of population	Year	No. Deaths	Rate per 1,000 of population
1909	34	1.06	1917	46	1.3	1925	49	1.3
1910	39	1.05	1918	51	1.5	1926	53	1.5
1911	34	0.9	1919	39	1.1	1927	55	1.6
1912	32	0.8	1920	56	1.5	1928	55	1.6
1913	40	1.08	1921	42	1.1	1929	62	1.8
1914	40	1.08	1922	44	1.1	1930	57	1.6
1915	36	0.9	1923	38	1.0			
1916	47	1.3	1924	53	1.4			

The death-rate per 1,000 from Cancer for England and Wales for 1929 was 1.4. The 1930 figures are not yet available.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

(I) PUBLIC HEALTH OFFICERS OF THE LOCAL AUTHORITY.

(a) MEDICAL.

Medical Officer of Health, Medical Superintendent Maternity and Child Welfare Centres, School Medical Officer and Medical Superintendent Maternity Home	G. H. Pearce, M.D. (Durh.), D.P.H., (Camb.), Barrister-at-Law (Inner Temple).
Assistant Medical Officer of Health, M. and C.W. (part time)	Hilda A. Channon, M.B., M.R.C.S. D.P.H.
School Oculist and Hon. Ophth. Surgeon Maternity Home (part time)	Randal Herley, B.A., L.R.C.P. and S. (Edin.), L.R.F.P. and S. (Glas.)

(b) OTHERS.

School Dentist (part time)	Marion M. Thom., L.D.S.
Veterinary Inspector (part time)	Geo. Whitehead, M.R.C.V.S.
Public Analyst (part time)	F. W. Richardson, F.I.C., F.C.S.
Senior Sanitary Inspector	Harold Hornby, M.R.S.I., † ‡ ¶
District Sanitary Inspectors	{ H. Hobson † ‡ * Resigned, Sept. 1930. W. Bailey † ‡ W. W. Wilkinson † ‡ Appointed Nov., 1930.
Superintendent Health Visitor, Superintendent School Nurse, Administrative Matron of Maternity Home...	H. Evans, § +
Health Visitors and School Nurses ...	E Farthing §+ O E. W. Farrar, § + O H. J. Smith § + O G Humphreys § + O
Chief Clerk	R. Hornsby
Clerk	K. Lister
Junior Clerk	C. I. Broadley x
Maternity Home—	{ Staff Nurse ... I. A. Walton § + Nurse Midwife ... M. Bird + Midwife ... A. Rowling + Midwife ... E. E. Crowther +
† Holds Certificate for Sanitary Inspectors, Royal Sanitary Institute.	
‡ Holds Certificate for Inspectors of Meat and other Foods, Royal Sanitary Institute.	
* Holds Certificate for Sanitary Science, etc., Royal Sanitary Institute.	
¶ Holds Certificate for Smoke Inspectors, Royal Sanitary Institute.	
§ Holds Certificate for three years' general training.	
O Holds Certificate for Health Visitors, Royal Sanitary Institute, approved by Ministry of Health.	
+ Holds Certificate of Central Midwives' Board.	
x Holds Northern Universities' School Leaving Certificate	

(2) NURSING IN THE HOME. NATURE OF THE ARRANGEMENTS IN THE AREA.

(a) GENERAL.—This is provided for the North, East, and West Wards by the Batley Nursing Association, and for the Soothill Ward by the Dewsbury Nursing Association. Both are Voluntary organisations working entirely independently of the Local Authority or County Council.

(b) INFECTIOUS DISEASES.—The rules of the local Nursing Associations prevent their nurses dealing with cases of infectious disease. As hospital accommodation is available for the majority of cases of infectious disease, and most patients—other than those suffering from non-notifiable infectious diseases—are removed from their homes to hospital, no difficulty exists.

(3) MIDWIVES.—On December 31st, 1930, the number of midwives living in Batley who had given notice of their intention to practice during that year was 14, comprising four in the Maternity Home, five Health Visitors, and five practising on their own account. In addition there are two certified midwives on the staff of the Batley Hospital and two employed as district nurses by the Batley Nursing Association.

In July, 1930, the Town Council made application to the Minister of Health for the issue of an Order under Sec. 62 of the Local Government Act, 1929, directing that the Town Council shall become the Local Supervising Authority for the district of the Borough of Batley. The application was based on the facts that (a) the Corporation possesses a complete Maternity and Child Welfare scheme including a fully equipped Maternity Home. (b) The Medical Officer of Health devotes his whole time to the Public Health, and is not engaged in general practice. (c) The Town Council possesses the requisite administrative facilities to discharge satisfactorily the functions of the Local Supervising Authority under the Midwives Acts.

The Town Council's application was refused. The Council decided the Minister be requested to re-consider this refusal, and a deputation consisting of the Mayor, Town Clerk and Medical Officer of Health visited the Ministry of Health in October in support of this application. At the year end the decision of the Minister had not been received.

It is contended that supervision of local midwives could be more satisfactorily performed by the Town Council through its Medical Officer of Health than by the County Council for gea-

graphical reasons alone, apart from other reasons. At present a nurse from the County Medical Officer's Department at Wakefield visits the midwives in Batley from time to time.

The Corporation does not employ or subsidise any midwives directly entirely for midwifery, apart from those in the Maternity Home. The Health Visitors have attended emergency cases and on one occasion the whole staff was employed in the Maternity Home for a month. In the event of a patient being unable to pay the fee of a midwife the Town Council has arranged, in approved cases, to make a grant (up to a maximum of 12/6d.) of 50 per cent. of the midwife's fee, such cases to be defined as those in which the family income does not exceed 6s. 6d. per head per family per week (after deduction of rent). No grant was applied for during the year. In the interest of the public health it is not desirable this be encouraged, such patients being better in hospital.

(4) **NATIONAL HEALTH INSURANCE.**—There are no important points in which the work of the Local Authority is related to or is administered in co-operation with this service.

(5) **POOR LAW MEDICAL OUT-RELIEF.**—Not being a County Borough, Batley is not directly concerned with the administration of this service.

(6) **LABORATORY FACILITIES.**—Bacteriological and Pathological facilities are provided at the County Council Laboratories, Wakefield, for the examination of material. Specimens sent from Batley during 1930 and reported upon were:—Widal, 12; Sputum, 37; Diphtheria, 141; Miscellaneous, 26; total, 216.

Bacteriological examinations of certified milk have been made monthly by the Clinical Research Association at the request of the Ministry of Health. Ordinary chemical examinations of food samples have been made by the analyst who usually does this work.

(7) **LEGISLATION IN FORCE.**—In addition to the Batley Corporation Act, 1921, the following general adoptive Acts, Byelaws, and Regulations relating to the public health are in force in Batley:—

The Baths and Washhouses Acts	1846 to 1882	The Infectious Diseases (Prevention) Act	1890
The Public Libraries Act	1892	The Notification of Births Act	1907
The Museums and Gymnasiums Act	1891	The Public Health Acts Amendment Act (Sections 45, 51, 61, 86 and 95 and Part VIII)	1907
The Public Health Act (Amendment) Act	1890		

Venereal Diseases—Various hospitals outside Batley.

Tuberculosis—Provided outside Batley by County Council.

Chronic Sick—Provided at Staincliffe Infirmary by County Council, formerly by Board of Guardians.

Mental, Mental Deficiency—Provided outside area by County Council.

Orthopædic—May be provided at Batley Hospital. Arrangements incomplete.

Ear, Nose and Throat—None for ear.

Puerperal Fever and Pyrexia—Batley Hospital and Fever Hospitals.

Ophthalmia Neonatorum—Batley Hospital.

Other—None.

Residents of Batley receive treatment at the various hospitals in Leeds, Bradford, Dewsbury and other towns, in addition to the above-named facilities.

Every facility is available at the Batley and District Hospital for operative surgery. There are two operating theatres and an X-Ray department. Pathological specimens are sent to a laboratory at Harrogate for examination and report.

The number of in-patients during 1930 at Batley Hospital was 1,115. In the Annual Report for 1927, on page 15, comment is made and reasons given in respect of the desirability of the provision of beds in local hospitals for paying patients. The need here, as elsewhere, is still very obvious.

Information respecting the Batley Hospital has been furnished by the Secretary (Mr. A. W. Western). The Clerks to the Joint Hospital Boards have supplied particulars in connection with the Isolation hospitals.

The Borough Treasurer states that during 1930 the Corporation paid to the Governors of the Batley Hospital £319 14s. 0d., being £150 annual subscription, £50 rent of mortuary, and £119 14s. 0d. through the Education Committee for removal of tonsils and adenoids from school children. Disinfection of bedding for the hospital by the Corporation entails a sum in wages annually. The approximate cost during 1930 was £6 12s. 11d.

The Corporation also paid to the Oakwell Joint Hospital Board and the Dewsbury and Heckmondwike Joint Hospital Board for precept and maintenance of patients in the isolation hospitals, £4,247 10s. 9d.

The Batley Maternity Home is provided by the Town Council. There are ten beds for patients in five wards, one bed in an isolation ward, and one bed in the labour room. The staff con-

sists of the Superintendent Health Visitor and School Nurse, who acts as Administrative Matron, one staff nurse, one nurse midwife, and 2 midwives. The domestic staff comprises cook, housemaid, two charwomen and handyman. The whole domestic staff is non-resident excepting the housemaid.

Details are as under :—

Year.	Bookings.	Patients	
		admitted.	Infants' Born.
1922 (Oct. to Dec.)		24	24
1923	205	156	153
1924	215	213	212
1925	212	213	209
1926	184	163	160
1927	206	203	202
1928	182	165	159
1929	197	209	210
1930	212	188	186

It must be remembered that the figure for "patients admitted" does not correspond with that for "patients confined."

The Housing Conditions of 1,293 patients, residents of Batley, who were confined in the Batley Maternity Home from opening in October, 1922, to December 31st, 1930, were as follows :—

TYPE OF HOUSE.—Back-to-back, 632; single, 290; through, 353; one room, 18.

NUMBER OF ROOMS IN HOUSE.—One, 24; two, 486; three, 404; four, 199; five, 147; six and over, 33.

NUMBER OF OCCUPANTS OF HOUSE.—Two, 41; three, 303; four, 349; five, 242; six, 143; seven, 93; eight, 58; nine, 27; ten, 21; eleven, 8; twelve, 7; fifteen, 1.

CIRCUMSTANCES OF PATIENTS.—Living in own house, 892; living in own house with lodgers, 28; living in lodgings, 373.

The total number of patients admitted to the Home during the above-mentioned period was 1,334 residents of Batley and 198 from outside the Borough, the complete figures being 1,532.

During the year 1930 21.0 per cent. of the Batley patients confined in the Maternity Home were living in lodgings.

The number of patients residing outside Batley confined in the Maternity Home since the opening in October, 1922, to December 31st, 1930, was 198, of whom 15 were admitted during 1930.

In 1925 it was arranged that it be brought to the notice of all patients that the cost to the Corporation was much greater than

the amount paid by individual patients, and each is invited to make such a donation when leaving the Home as their financial circumstances may warrant. The amounts contributed have been :—

1925 ...	£10 10 6	from 18 patients ;	total patients being	213
1926 ...	£18 11 0	„ 23 „ „ „ „	„ „	163
1927 ...	£26 17 6	„ 27 „ „ „ „	„ „	203
1928 ...	£3 5 0	„ 5 „ „ „ „	„ „	165
1929 ...	£15 7 0	„ 30 „ „ „ „	„ „	209
1930 ...	£11 4 0	„ 23 „ „ „ „	„ „	188
	£85 15 0	„ 126 „ „ „ „	„ „	1141

The donations amount during the five years to 13s. 7d. per head of those contributing, and only 1s. 6d. per head of total patients admitted. On no occasion has any contribution been received from those patients who reside outside Batley, although each is aware when leaving the Home that her period of residence has cost more than has been received in fees from herself.

THE COUNTY HOSPITAL, BATLEY, formerly known as the Staincliffe Poor Law Infirmary, contains 330 beds. It is now under the control of the West Riding County Council and receives patients from the Borough of Batley and other areas.

(9) MATERNITY and NURSING HOMES.—The Batley Municipal Maternity Home has been previously described. There are no Nursing Homes in the Borough.

(10) MATERNAL MORTALITY.—In 1928 the Medical Officer of Health was designated as the person to investigate maternal deaths. The arrangement still continues.

(11) INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS and HOMELESS CHILDREN (apart from the Poor Law) is not provided. An unmarried female may be admitted to the Batley Maternity Home for confinement on the first occasion, but not subsequently.

(12) There is no Institutional Provision by the Corporation for the Care of Mental Defectives. This is the duty of the West Riding County Council. There are cases attending the elementary schools which have been notified to the County Council but still remain at school, the presumption being that accommodation is insufficient.

(13) **AMBULANCE FACILITIES.**—(a) For infectious diseases by the Oakwell and Dewsbury Joint Isolation Hospitals, (b) for non-infectious and accident cases by the Batley Division of the St. John Ambulance Brigade. As is invariably the case, Superintendent Horne has rendered much assistance in the removal of patients. His services are of considerable value.

(14) **CLINICS AND TREATMENT CENTRES.**

Name.	Address.	Sessions.	Authority Providing.
Ante Natal Clinic	Maternity Home	Monday, 1-30—3-30.	Batley Corporation
Infant Welfare Centre	Town Mission Hall	Tuesday, 2—4.	Ditto
Ditto	Wesleyan Sunday Sch., Batley Carr	Wednesday, 2-15—3-45	Ditto
Minor Ailments Clinic	School Clinic, Bk Cambridge St.	Daily, 9 a.m. and 4-15 p.m.	Ditto
Ophthalmic Clinic	Ditto	When required, 2—5.	Ditto
Dental Clinic	Ditto	Mon., Tues., Wed 9—12, 2—5. Alternate Saturdays, 9—12.	Ditto
Tuberculosis Dispensary	Branch House, Batley.	Thursdays, 2—4 and 6—8.	West Riding County Council
Treatment Centres for Venereal Disease	Dewsbury Infirmary	Monday, 3. Thursday, 6-30.	Ditto.

Attention is again drawn to the desirability of arrangements being made, if possible, for the establishment of a treatment centre for patients suffering from venereal diseases at the Batley Hospital, as is customary in other towns. During 1930, 42 males and 6 females attended the venereal diseases clinics at Dewsbury Infirmary; one male and two females attended similar clinics at Leeds Infirmary. These patients were resident in Batley. As is customary, others, without doubt, went elsewhere or remained untreated, and some would be attended by their own doctors.

ANTE-NATAL CLINIC, 1925 to 1930.

	1925	1926	1927	1928	1929	1930
Individual patients attending						
Clinic	194	193	228	190	249	241
Patients found normal	78	40	64	58	68	68
Patients found suffering						
from one or more defects	116	153	164	132	181	173
Total number of attend-						
ances at Clinic	500	528	728	681	743	694

DEFECTS CLASSIFIED.

Respiratory System, includ-						
ing Tuberculosis	10	47	41	17	16	9
Circulatory System, exclud-						
ing Varicose Veins	18	39	45	53	20	15
Digestive System, excluding						
defective teeth and con-						
stipation	4	14	21	4	1	12
Urinary System	12	14	15	10	13	9
Small or deformed pelvis ...	17	7	8	6	11	12
Gynaecological defects, in-						
cluding venereal disease	7	11	11	14	14	12
Deformities of breasts	6	7	3	1	5	11
Varicose veins	27	44	45	42	54	36
Constipation	24	48	23	23	21	24
Placenta Praevia	1	Nil	Nil	Nil	Nil	Nil
Teeth	41	45	53	42	53	49
Miscellaneous	12	28	20	9	16	34
Anæmia and Debility	Nil.	Nil.	Nil.	Nil.	62	57
Communications to practi-						
tioners respecting patients	53	66	88	67	46	45
Communications to midwives						
respecting patients					1	2

REPORT OF THE DEPUTY MEDICAL OFFICER OF HEALTH.

To the Medical Officer of Health.

Sir,

In presenting to you the report on my third year of office, I find that there is little fresh to say, but that there are the same complaints to reiterate. The numbers attending the Ante-natal Clinic and the Infant Welfare Centre are well maintained, but the work is still handicapped in certain directions. Foremost among these is the lack of free dental treatment for expectant mothers; not until we can offer such treatment shall we be able to say that we are doing all that lies within our power for them. If neighbouring districts can provide this service, surely Batley can, and I must urge that facilities be granted in the near future. I am aware you made this recommendation to the Maternity and Child Welfare Committee before I commenced work in Batley.

At the Infant Welfare Centre we are always trying to emphasize the **welfare** side of the work, and to prevent the Centre from becoming a minor ailment clinic and a free milk distributing centre. Much of my time which could otherwise be spent in giving much needed advice, is taken up in endorsing free milk forms. And, as in other years, the mothers and fathers to whom we give most are frequently the most unsatisfactory—unpunctual, careless and complaining; while those who can just afford to pay their way are usually punctual, painstaking and appreciative of help given. It is not right that these latter should sometimes be turned away because my time is absorbed by the former.

In conclusion, I should like to comment on the interest in the women and children taken by the staff at both centres, and on the intimate knowledge of the individual circumstances shown by them. It has been a great pleasure to work with them during the past three years.

HILDA A. CHANNON.

Medical Officer's Department, Batley,
15th January, 1931.

ATTENDANCES AT WELFARE CENTRES.

TOWN MISSION :—

Yearly Average.	No. of mothers on register.	Expectant mothers.	Mothers with Infants.	New admissions.	Average attendance per mother.
1916-1920	374	12	1,982	59	3.8
1921-1925 Year.	458	54	2,543	274	5.4
1926	530	57	3,223	321	6.08
1927	475	19	2,810	236	5.9
1928	410	8	2,342	212	5.7
1929	494	26	2,621	217	5.3
1930	380	26	2,501	198	6.6

BATLEY CARR :—

Yearly Average.	No. of mothers on register.	Expectant mothers.	Mothers with Infants.	New admissions.	Average attendance per mother.
1919-1923 Year.	144	2	1,132	69	6.8
1924	174	50	1,439	70	8.0
1925	224	46	1,648	116	7.0
1926	222	20	1,729	97	7.8
1927	217	7	1,527	97	7.03
1928	195	2	1,160	64	5.9
1929	189	5	1,055	50	5.6
1930	197	8	1,262	70	6.4

RECORD OF INFANTS MEDICALLY EXAMINED AT CENTRES DURING RECENT YEARS.

Year.	New Cases Seen.	ALL CASES.		
		Infants under 6 months.	Older Children.	Not wholly satisfactory.
1926	248	269	201	275
1927	218	309	208	230
1928	186	406	252	306
1929	216	445	391	351
1930	188	359	574	398

Table showing number of deaths amongst infants who attended or did not attend a Welfare Centre. Deaths under 4 weeks are not included for feeding.

Year.	Infant Deaths.		Attended Centre.	Not Attended Centre.	Breast Fed.	Artificially Fed.
	Number.	Died in first month.				
1921	64	35	12	17	6	23
1922	54	27	9	18	19	8
1923	60	19	12	29	11	30
1924	42	25	9	8	4	13
1925	58	53	6	19	13	12
1926	43	29	10	4	9	5
1927	46	24	9	13	15	7
1928	30	20	5	5	5	5
1929	56	31	11	14	20	5
1930	30	17	4	9	12	1

WORK OF HEALTH VISITORS DURING 1930.

Ante-Natal—First Visits	10	
Re-Visits	2	
	—	12
Infants under 12 months—Visits		
First Visits	481	
Re-Visits	4476	
	—	4957
Visits to Children—		
Between 12 months and 3 years	2656	
Between 3 and 5 years	1689	
	—	4345
Visits to cases of—		
Ophthalmia Neonatorum	1	
Pneumonia (notified)	27	
Tuberculosis	174	
Still Births	12	
Diarrhoea	1	
Puerperal Pyrexia	4	
Miscellaneous	120	
	—	339
	—	
Total Visits	9653	

The preceding figures do not include visits paid by the nurses in their capacity as School Nurses, which were 2,536. The grand total, therefore, of visits by the Health Visitors and School Nurses during 1930 was 12,189.

The work in this branch of the Department has been in arrears since 1927 owing to resignations, sickness, and long delays in filling vacancies.

Frequent changes amongst the Health Visitors means that the intimate touch between mothers and nurses is wanting, because it takes a new Health Visitor the greater part of a year to become familiar with her district and the residents amongst whom her work has to be done. Mothers often hesitate to discuss matters respecting the welfare of themselves and their children with a stranger when they would have been anxious to do this and readily seek advice from a Health Visitor well known to them.

(15) Batley being a non-County Borough, the arrangements made for the discharge of the medical services transferred under the provisions of the Local Government Act are the concern of the West Riding County Council.

BATLEY MATERNITY AND CHILD WELFARE CENTRES.

VOLUNTARY WORKERS' SECTION.

BALANCE SHEET, 1930.

RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Cash in Bank, 31st Dec., 1929	19 8	Gifts	11 0
Cash in Co-op. Society, 31st Dec., 1929	2 19 3	Biscuits, Tea, Sugar, Flannel, Vests, Gowns, Material and Making	20 1 7½
Cash in Hand, Dec., 1929	1 8 5½	Maternity Belts	2 2 8
Subscriptions	3 10 0	Harrington Squares	18 2½
TOWN MISSION—		Savings Club re-paid	5 0
Teas	£6 2 0½	Milk	1 0 0
Garments	£6 6 5½	Batley Carr Caretaker	3 2 4½
BATLEY CARR—		Cash in Bank, 31st Dec., 1930	19 8
Teas and Garments	12 8 6	Cash in Co-op. Society, 31st Dec., 1930	6 10
Maternity Belts	2 13 10		
Co-op. Dividend	3 1 0		
	2 6 8		
	£29 7 4½		£29 7 4½

(Mrs.) SARAH ANN GREENWOOD, Hon. Treasurer.

(Mrs.) ETHEL STEWARD, Acting Hon. Secretary.

The thanks of the Voluntary Committee are due to Mrs. Steward for her services as Secretary at the Welfare Centre during the illness of Mrs. Thompson.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER SUPPLY.—Particulars are given in the Medical Officer's Annual Report for 1925. The fourth reservoir, completed recently, is full, and it is stated Batley has sufficient water for its own use and that of neighbouring towns, should application be made, for many years to come. The quality of the water is excellent, but there is occasionally a tendency to dissolve lead from the service pipes, which is to be expected from upland surface waters, but in the case of Batley water there is comparatively little derived from peaty gathering grounds, the major portion coming from non-peaty areas and springs. This was fully gone into in 1921, when the Corporation promoted a Bill in Parliament in connection with water supplies and other matters. The evidence then given describes the actual position and is available for reference.

The polluted spring water at Knottingley Wells, in one of the main streets of Batley, still provides water for many who prefer to drink it rather than the pure supply available from the taps in their houses.

Reference was made to this in last year's annual report, when, on the recommendation of the Medical Officer of Health, a notice board was erected warning the public that this water was unfit for drinking purposes. The board was removed when road improvements were being executed and not replaced. The Medical Officer of Health reported this fact at the meeting of the Public Health Committee on June 18th, 1930. It is obvious that so long as people prefer water heavily contaminated with sewage in place of the pure supply available, they must run the risk of sickness and possible death, as happened last year.

In October, 1930, I received from Dr. Potts, M.O.H. to the West Riding County Council, a letter dated October 3rd, in which he stated two samples of water had been taken in Batley and the Public Analyst had reported :—

Sample No. 1 (after standing half-an-hour in pipe)—

No lead present.

Sample No. 2 (after standing 13 hours in pipe)—

1/7th grain of lead per gallon present.

These samples had been collected from the West Riding Police Station, Batley.

I reported this information to the Public Health Committee and sent a copy of the letter from Dr. Potts to Mr. Duckworth, the Water Engineer. On October 20th, 1930, Mr. Duckworth submitted a sample of water taken from his office tap upstairs after standing 14 hours to a Huddersfield analyst. The analyst reported no lead present.

He also submitted on October 19th another sample from the same source after standing 14 hours to the West Riding County Council analyst, who also reported no lead present.

RIVERS AND STREAMS.—The Batley beck is polluted by dye waters and trade waste. The West Riding of Yorkshire Rivers Board is the authority which exercises supervision.

DRAINAGE AND SEWERAGE.—The Borough Surveyor, Mr. H. L. Hall, has kindly supplied the following information:—

“In reply to your enquiries, I beg to say that there has been nothing done which needs special comment at the Sewage Outfall Works during this financial year. The ordinary works in connection with cleansing of Detritus Tanks, Sludge Lagoons, and ordinary Maintenance works, have been done periodically.”

CLOSET ACCOMMODATION, 1930.

Water Closets	7,733.
Trough and Automatic Water Closets	216
Trough and Automatic Water Closets converted into proper water closets	None.
Blocks of Trough Water Closets	29
Blocks of Trough Water Closets converted into proper water closets	None.
Pail Closets	7
Pail closets converted into proper water closets	2
Privy middens	21
Privy middens converted into proper water closets	9
Additional water closets provided for old property	45
Additional water closets provided for new property	44

On assuming office twenty-one years ago one of the first things I advised should be done was to rid the town of trough closets for two reasons—(a) to improve the hygienic conditions, and (b) to save money. I have often repeated this advice. It costs more than £100 annually in wages to cleanse these obsolete and insanitary erections.

SCAVENGING.

COLLECTION AND DISPOSAL OF REFUSE.

The whole of this section has been compiled by Mr. Harold Hornby, M.R.S.I., Senior Sanitary Inspector :—

In the Annual Report for 1929 a full description was given under the above heading of the changes in organisation which had been made to increase the efficiency of the staff. Details were given as to the system of weighing, checking and recording of all the loads of refuse dealt with, together with the methods of disposal, and it was outlined how each vehicle and its complement of men had been made responsible for a compact “cleansing district” instead of all vehicles taking various directions daily and working without method, as obtained previously. The changes effected have resulted not only in the work being done better, but shew solid financial savings, as will be seen on reference to costs. It is hoped by further improving on the advances already gained that still further savings will accrue without prejudicing efficiency in any way.

Early in the year the Public Health Committee appointed a Sub-Committee to investigate and report upon a proposal to close the Destructor Works and adopt tipping methods for the disposal of refuse.

The following report of the Sub-Committee’s findings was accepted by the Public Health Committee :—

REPORT BY THE REFUSE COLLECTION AND DISPOSAL SUB-COMMITTEE ON THE PROPOSAL TO CLOSE THE DESTRUCTOR WORKS AND ADOPT TIPPING METHODS FOR THE DISPOSAL OF REFUSE.

The Refuse Collection and Disposal Sub-Committee, in response to opinions expressed by various members of the Town Council to the effect that tipping methods should be adopted as a means of refuse disposal alternative to the present system of incineration, have given consideration to the matter and report their findings.

The Refuse Destructor Works and tips have been visited and a thorough investigation made of the methods of disposal employed at present.

The opinions referred to appear to arise from a belief that the burning of refuse as carried out in Batley is unnecessarily costly, especially in view of the strained financial condition of the

town, and that at least some hundreds of pounds per annum might be saved to the rates if the Destructor Works were closed and all refuse was tipped.

The issue is, therefore, purely financial so far as the points now under consideration are concerned.

Public Health considerations are merely referred to in passing, but the Sub-Committee wish it to be understood that the present methods of incineration are beyond reproach in this respect, and granting that tipping may be controlled so as not to give rise to a nuisance, the Corporation has nothing to gain in matters of public health by changed methods of disposal.

As regards the Destructor Works the Sub-Committee is of opinion that the expenditure as represented by the costs shewn in the accounts of the Public Health Committee for Burning of Refuse is not the true economic cost. Certain advantages enjoyed by other Departments would be lost if the Destructor Works were closed and if a loss amounting to the sum of the value of these advantages was not counterbalanced by an equivalent saving in the expenditure on the alternative methods of disposal, then the Corporation as a whole would be the loser by the change, even though some moderate saving might be apparent in Refuse Disposal costs. The Sub-Committee desires to make it clear that at this stage they are not concerned with the question of whether Departments should pay more than at present for any benefits which they receive from the Destructor Works nor as to whether these benefits should be discontinued as a departmental move to reduce expenditure. The conclusion which it is desired to arrive at is whether the Corporation as a whole would be the gainer or loser by the closure of the Destructor Works.

The advantages enjoyed by other Departments are as follows:

- (1) Supply of steam to the Electricity Dept. (See Appendix No. 1).
- (2) Improved draught to the Electricity Dept. by the discharge of hot gases into the chimney, so enabling that Department's plant to derive a higher heat value from their own fuel.
- (3) Free supply of clinkers to the Sewerage Works, where mortar is manufactured and sold. (See Appendix No. 2).
- (4) Free steam supply to the steam disinfecter.

With reference to tipping, the Sub-Committee are of opinion that such means as an approved method of disposal are quite practicable in Batley, but only if and so long as the work is properly controlled, i.e., the refuse is tipped in layers not exceeding 6 feet deep; all tins are set upright and filled; paper, etc., is raked into position and covered with heavier refuse; and a top dressing of soil is placed over all refuse immediately after it is tipped and levelled. Taking Mount Pleasant Tip as an example; if 100 per cent. tipping methods were adopted, the number of loads going to this tip alone would be 150 per week. To deal with this matter properly, soil would have to be excavated for a top covering or sweepings collected and transported to the site. This would require labour. In the circumstances, it would appear that the change would simply mean the transfer of workmen from one job to another and this would not result in any appreciable saving to the Corporation and probably causing a loss to some departments, though there might be a reduction in disposal costs as such if another Department of the Corporation met the expense of soiling and levelling with the object of forming a playing field.

With regard to diseased meat, dog carcasses, slaughter-house refuse and offensive matters from fish shops and other premises, the Sub-Committee is of opinion that such refuse should be burned. It was at first thought that to deal with these matters in the event of tipping being adopted as the Town's primary means of disposal, one stoker might be left at the Destructor Works to deal with offensive matters unsuitable for tipping. It was proposed for this purpose to work one or two furnaces on natural draught principles. This proposal has now become impracticable because the Electrical Engineer is of opinion that if the Destructor Works were to cease steam raising, the loss of draught to his own plant would necessitate the Destructor flues being disconnected from the main chimney and the opening building up. Thus the Public Health Department would be prevented from burning offensive matter which could not be disposed of on tips. In view of the facts stated, the Sub-Committee cannot discover the possibility of any sufficient advantage to the Corporation as a whole, either on financial or public health grounds, which would justify them in recommending closure of the Destructor Works at the present time. If, in future, circumstances become altered by the Electricity Department ceasing to generate current and there is no useful purpose to which Destructor Work's steam may be utilised, then tipping methods may be extended with advantage, the

Destructor Works being continued with a reduced staff to destroy offensive matter unsuitable for tipping and to work the steam disinfectors.

The Sub-Committee therefore recommends a continuance of the present methods of refuse disposal until the final position is known with regard to generation of current by the Electricity Department. Finally, it should be noted that if the Destructor Works closed down and the flue brickwork and boiler setting became damp and cold, the plant could not be re-started without considerable expense in repairs, if a return to incineration should be found necessary after a few months.

Medical Officer's Department,
Market Place, Batley
14th May, 1930.

APPENDIX No. 1.

The Electricity Department pays the sum of £200 per annum for steam supplied by the Destructor Works.

Out of a total weight of 9,461 tons of refuse collected last year, 6,254 tons were used for steam raising at the Destructor Works. Some rough indication of the value of the steam generated may be arrived at in two ways: firstly, by considering the heat value of the refuse compared with the equivalent in coal used by the Electricity Department; and, secondly, by taking the annual water consumption and considering the cost of evaporation.

Taking the calorific value of refuse at 2,000 British Thermal Units per pound and that of Electricity Works coal at 12,000 British Thermal Units per pound, the 6,254 tons of refuse burned were equivalent to 1,042 tons of coal, which at 13/6 per ton results in a fuel value of £703.

During the financial year ended 31st March, 1930, the quantity of water used at the Destructor Works was 1,310,000 gallons, at a cost of £91 10s. 4d. The value in fuel required to evaporate the above quantity of water, calculated on the basis of coal at 13/6d. per ton and allowing 6 lbs. of water evaporated at 180 lbs. per sq. in. pressure (and superheated) per lb. of coal, is equivalent to 974 tons of coal at 13/6d. a ton, resulting in a fuel value of £657.

Both methods of calculation shew that the Destructor Works steam is of immensely greater value than the income received. Whilst the full value of all steam raised will not be passed on, it must be noted that nothing has been allowed in the calculation for

- (1) Cost of water evaporated.
- (2) Stokers' wages.
- (3) Removal of clinkers.
- (4) Plant maintenance charges.
- (5) Insurance, rents, rates and taxes.

APPENDIX No. 2.

Last year the Destructor Works produced and bore the cost of transport of 1,553 tons of clinkers to the Sewerage Works, for the manufacture of mortar. The transport costs alone were £207 11s. 6d. The income derived from the sale of mortar was £560.

No proportion of such income is enjoyed by the Destructor Works.

Medical Officer's Department,
Market Place, Batley,
14th May, 1930.

The following table shews the monthly variation in weights of loads of refuse collected, and compares the results with those for the previous year :—

TABLE SHEWING REFUSE COLLECTED—YEARS 1929 and 1930.

Month	FREIGHTER TRANSPORT.				HORSE TRANSPORT.							
	No. of loads 1929	Weight Tons 1929	Av. wt. per load 1929	No. of loads 1930	Weight Tons 1930	Av. wt. per load 1930	No. of loads 1929	Weight Tons 1929	Av. wt. per load 1929	No. of loads 1930	Weight Tons 1930	Av. wt. per load 1930
January	123	*254	T 2 1 1	122	239	T 2 1 1	1120	+892	6 3 3	855	676	6 3 3
February	103	*211	*2 1 0	108	213	1 19 1	921	+725	+15 3	708	559	15 3
March	102	*256	*2 10 0	115	220	1 18 1	723	+569	+15 3	764	592	15 2
April	125	*248	*1 19 2	108	203	1 17 2	906	+668	+14 3	744	562	15 0
May	133	*263	*1 19 2	120	218	1 16 1	890	+534	+12 0	808	570	14 0
June	111	179	1 12 1	98	163	1 13 1	809	499	12 1	653	439	13 2
July	104	158	1 10 1	95	153	1 12 1	820	504	12 1	670	449	13 2
August	118	191	1 12 2	98	160	1 12 3	697	426	12 1	669	442	13 1
September	113	178	1 11 2	115	181	1 11 1	670	406	12 0	666	435	13 0
October	103	176	1 14 0	117	198	1 14 0	791	553	14 0	769	536	14 0
November	114	219	1 18 1	109	197	1 16 0	745	593	15 3	728	530	14 2
December	106	205	1 18 3	112	205	1 16 3	722	563	15 2	802	602	15 0

* These weights not reliable. It was proved to the Committee at the time that the driver was falsifying weight tickets.

+ Figures calculated. There were no arrangements for weighing horse drawn vehicles in operation at the time.

It will be noted that as compared with the previous year the average weights of loads fell during November and December of 1930 both in the case of horse drawn vehicles and the Freighter. The cause was due in a large degree to underloading by the staff, for, when a strong warning was given, the average weights per load assumed an immediate increase. As regards horse transport, a very important point to notice is that during January and February, when refuse reached its maximum density, the average load was only 15 cwt. 3 qrs. This suggests that if we had carts of a greater cubic capacity, horse transport would stand a better opportunity of competing with mechanical. Again, with horse transport it is only possible to collect four loads a day from the distant points of the Borough, i.e., Staincliffe, Healey and Hanging Heaton. These are areas which should certainly be served by mechanical transport to prevent distance limiting the working capacity of that portion of the cleansing staff working under the longer haulage conditions. The weights referred to for the year 1930 are fairly accurate, as 86 per cent. of the loads collected were actually weighed, the remaining 14 per cent. being estimated on average weights based on the greater proportion weighed, according to season.

As in previous years, and following the instructions of the Ministry of Health, collection and disposal have been kept as separate items and disposal has been sub-divided into Incineration at the Destructor Works and Tipping respectively.

The number of days in the year has been taken as 365 and not the actual working days.

The Registrar-General's estimate of the population is 34,550, the number of occupied houses 9,925, and the number of premises from which refuse is collected is not less than 10,000.

The staff engaged in collection is as follows:—

Mechanical Transport (S.D. Freighter)	1
Horse Transport (Carts)	7
Drivers	8
Throwers-out (including working foreman)	10

In view of the fact that the yield of refuse for the town falls considerably during the summer months, which has been fully demonstrated by the system of weighing and carefully recording the amounts dealt with according to season, it became evident that a

staff equal to the winter's work would be underworked during the summer season unless an adjustment was made. A new departure was therefore made in the way of temporarily reducing staff during the summer months ; thus, through the co-operation of the Borough Surveyor one horse and cart was transferred to the General Works Department from June 11th to October 10th. The thrower-out who was released was thus able to fill the places in turn of employees taking their annual holidays, thus obviating any necessity to engage extra hands for this purpose, as has been customary in former years. This modification did not prejudice efficiency to the smallest degree and assisted in reducing expenditure. It is proposed to continue further on these lines during the next summer season.

Clinkers are now moved from the Destructor Works by contract at 2/- per ton. The cost of similar work done by the Corporation carts is 2/9 per ton. Table IV shews the costs of Refuse Collection and Disposal for the year as compared with those for 1929. It will be seen there has been a reduction in collection costs by £337 and in disposal costs by £136, making a total saving of £473. This satisfactory result has been made possible by generally improving organisation, which not only has achieved economy in working but has increased efficiency. Complaints respecting delays in collection are practically non-existent.

Trade refuse continues to be removed without any special charge, and some arrangement is needed whereby trading premises producing relatively large quantities of refuse could be required to contribute to the cost of collection and disposal, instead of the whole cost falling on the rates, as obtains at present.

About 66 per cent. of the total refuse dealt with was burned at the Destructor Works, where the plant consists of a Horsfall Destructor with four cells, staffed by a foreman and four stokers. The calorific value of the refuse reduced is considerable and is utilised for steam raising by means of a Lancashire boiler fitted with a superheater, the steam being passed on to the Electricity Department. It is felt that the sum of £200 per annum received for this steam is not commensurate with its true value, especially as all the water evaporated and boiler maintenance charges have to be met as disposal charges.

Disposal of clinker continues to be a heavy charge on the Destructor Works. Reference to Table III shews that the weight

of clinker stated hereunder were supplied and transported free to other Departments, at the approximate costs stated, borne entirely by the Destructor Works.

	£	s.	d.
Clinker to Sewerage Works for manufacture of mortar—			
660 tons. Cost of transport	90	15	0
871 tons. (Hired haulage)	87	2	0
Hard clinker to New Ing Fields for road making—			
105 tons. Cost of transport	14	8	9
Clinker and fine ash used as a top covering for refuse at Mount Pleasant Tip—			
608 tons. Cost of transport	83	14	9
Total	£276	0	6

Before concluding the portion of the report relative to scavenging, mention may be made of an interesting experience which the Department has had in connection with a fire at Grange Road Tip. During 1929, an uninsulated portion which in previous years had, perhaps unwisely, been tipped in one layer to a depth of twelve feet, took fire, and the services of the Fire Brigade were required to extinguish areas which were in flame. To ascertain if spontaneous combustion was the cause of the trouble, a narrow trench was excavated for a distance of 20 feet across the thickest portion of the tip, which demonstrated that spontaneous combustion was the responsible cause. It may be mentioned here that spontaneous combustion in refuse tips is brought about by the heat generated through the oxidation of various decomposable matters ordinarily contained in the refuse itself. As the heat is given off, the closely packed matter in a tip acts as a blanket, and thus the general temperature is progressively increased and oxidation further stimulated. This process continues until actual ignition temperature is reached, when the refuse bursts into flame. In the instance referred to there appeared only two alternative courses of action to choose from:—(1) To dig out the hot portions so as to allow the heat to dissipate; this would have been most expensive as Grange Road Tip contains many thousands of tons of refuse; and (2) To arrest combustion by thoroughly insulating the tip with a top layer of material capable of excluding oxygen. On grounds of economy the latter method was attempted, though attended with some risk. By the co-operation of the Borough

Surveyor sludge from the Sewerage Works spread in two layers to a total depth of two feet, was used to form an insulation covering on those parts of the tip not already covered. The attempted remedy has proved quite successful, and in this way a contingency which in other circumstances might have cost the Corporation many hundreds of pounds was dealt with cheaply.

Iron bars recently driven into and withdrawn from what was the hottest portion of this tip now indicate the same to be quite cool.

As a result of this unpleasant experience all tipping is now being conducted on fully controlled principles, i.e., in layers not exceeding 6 feet thick, properly covered with soil where available.

TABLE 1.—Collection of Refuse.

MONTHLY TABLE.

1930.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
No. of Slaughterhouse receptacles emptied..	69	41	44	52	62	56	49	57	55	83	42	46	656
No. of Fish Receptacles emptied ..	156	125	150	115	158	118	119	138	141	174	170	127	1691
No. of Privy Pails emptied ..	37	31	32	33	40	46	40	32	32	47	32	32	434
No. of Privy Middens emptied ..	83	65	66	65	80	45	79	64	64	108	49	65	833
No. of Dry Ashpits emptied ..	2434	2547	2599	2051	2579	2124	2430	2536	2677	2640	2533	2120	29270
No. of Dustbins emptied	22597	20394	21639	20850	23062	21655	23874	22461	23129	23761	21476	23515	267413
Totals ..	26376	23203	24530	23166	25981	24044	25591	25288	26093	26813	24302	25905	300297

TABLE II—DISPOSAL OF REFUSE.

MONTHLY TABLE.

1930.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Tons of refuse burnt at Destructor ...	607-17-2	560-10-1	581-19-0	442-17-2	498-10-3	402-11-2	473-17-0	429- 7-0	427-18-2	506-10-0	433-13-2	410-17-0	5776- 9-2
Tons of refuse to Grange Road Tip	117- 9-0	100- 7-3	105- 8-0	94-10-0	90- 6-0	70-17-2	70- 4-0	60- 5-3	59-16-0	76- 6-0	68- 3-0	69-15-0	983- 8-0
Tons of refuse to White Lea Tip ...	66-16-2	55- 1-0	71- 4-1	118-17-2	134- 1-1	87-14-0	54- 7-2	72- 6-1	53-15-0	111- 0-0	62-13-2	88- 4-0	976- 0-3
Tons of refuse to Cross Bank Tip ...	...	...	...	...	...	...	...	35- 2-1	57-17-0	...	118-18-0	164- 5-0	376- 2-1
Tons of refuse to Farmers	4-14-2	3- 3-0	3- 2-0	3- 0-0	3-10-0	2-14-0	3- 7-2	1-19-3	2-12-0	5-12-0	5-16-0	6- 0-0	45-10-3
Tons of refuse to Mount Pleasant Recreation Grnd.	115-13-0	49- 1-1	48- 0-3	103- 2-2	56-16-3	37- 7-3	0-19-0	3-10-2	14-10-1	35- 8-2	37-18-0	69-12-0	572- 0-0
Tons of refuse to Grammar Schl. Tip	3- 3-0	3- 3-0	2- 6-2	2- 5-0	4-18-0	0-13-2	...	...	...	...	...	...	16- 9-0
Totals	915-13-2	771- 6-1	812- 0-2	764-12-2	788- 2-3	601-18-0	602-15-0	602-11-2	616- 8-3	734-16-2	727- 2-0	808-13-0	8746- 0-1

TABLE III—DISPOSAL OF CLINKER FROM DESTRUCTOR WORKS.

MONTHLY TABLE.

1930.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Tons of clinker to Sewerage Works—Corporation carts Hired haulage ...	47- 6-0 100- 0-1	63- 5-0 ...	68- 5-0 ...	30-14-1 113-17-2	67- 2-1 76-19-0	34-17-2 104-13-0	78-15-0 48- 2-1	78-12-2 ...	108-15-0 ...	52- 5-3 121-11-2	30- 4-2 132-11-3	... 173- 4-0	660- 2-3 870-19-1
Tons of clinker to New Ing Fields ...	8-12-0	23- 0-0	51- 3-3	19- 6-3	2- 5-2	...	...	1- 1-1	...	...	...	...	105- 9-1
Tons of clinker to Mount Pleasant Recreation Ground ...	37- 1-1	137- 9-0	121-13-1	26- 6-1	44-13-3	14-16-2	51- 6-3	89-13-2	45-13-0	21- 1-2	18- 7-0	...	608- 1-3
Tons of clinker to various places	3- 4-2	3- 9-0	1- 2-3	...	...	...	...	2- 2-2	...	...	...	...	9-18-3
Totals	196- 4-0	227- 3-0	242- 4-3	190- 4-3	191- 0-2	154- 7-0	178- 4-0	171- 9-3	154-8-0	194-18-3	181- 3-1	173- 4-0	2254-11-3

TABLE IV.
COLLECTION OF REFUSE.

EXPENDITURE.	Year ended 31.12.29.			Year ended 31.12.30.		
	Total.	Transport.		Total	Transport.	
		Freighter	Horse		Freighter	Horse
	£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
Wages	2666 4 0	611 17 4	2054 6 8	2424 7 8	560 19 0	1863 8 8
Teamwork	834 19 8	—	834 19 8	766 19 9	—	766 19 9
Contribn. Supern.	94 4 9	38 0 0	56 4 9	96 12 0	27 10 4	69 1 8
Natl. Health Ins.	43 15 4	9 17 0	33 18 4	40 4 6	7 16 0	30 18 2
Unemp. Ins.	7 1 4	1 19 0	5 2 4	—	1 10 4	—
Workmen's Comp. Ins.	28 0 0	9 0 0	19 0 0	21 10 2	7 0 0	14 10 2
Tools and Sundries	17 2 6	7 7 6	9 15 0	5 8 9	—	5 8 9
Coal and Coke	2 17 7	2 17 7	—	1 11 0	1 11 0	—
Weighings	11 9 0	1 12 6	9 16 6	19 11 4	2 8 11	17 2 5
Sundry Expenses	—	—	—	3 10 0	—	3 10 0
S.D. Freighter—						
1/5th Cost	151 0 0	151 0 0	—	151 0 0	151 0 0	—
Petrol and Oil	55 4 2	55 4 2	—	44 19 11	44 19 11	—
Repairs	29 7 6	29 7 6	—	36 11 4	36 11 4	—
Tools and Sundries	7 7 7	7 7 7	—	11 3	11 3	—
Insurance	6 12 8	6 12 8	—	6 15 10	6 15 10	—
Licence	26 0 0	26 0 0	—	25 0 0	25 0 0	—
Total Expenditure	3931 6 1	958 2 10	3023 3 3	3644 13 6	873 13 11	2770 19 7
Total weight of refuse collected	9461 tons	2538 tons	6923 tons	8746 tons	2354 tons	6392 tons
Cost per ton of refuse collected	8/5d.	7/6½d.	8/8½d.	8/4d.	7/5d.	8/8d.

DISPOSAL OF REFUSE.

EXPENDITURE.	Year ended 31.12.29.			Year ended 31.12.30.		
	Total	Incinern.	Tipping	Total.	Incinern.	Tipping
	£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
Wages	1717 4 10	1593 4 10	124 0 0	1670 6 11	1336 6 9	334 0 2
Teamwork	183 12 8	188 12 8	—	81 10 1	81 10 1	—
Contribn. Supern.	52 0 0	52 0 0	—	51 1 2	34 7 2	16 14 0
Natl. Health Ins.	15 12 0	13 13 0	—	23 14 11	15 18 11	7 16 0
Unemp. Ins.	2 13 4	1 3 0	1 19 0	—	—	—
Workmen's Comp. Ins.	10 0 0	8 0 0	1 10 4	14 1 8	8 9 0	5 12 8
Rates	228 17 6	210 0 0	2 0 0	224 8 9	222 8 9	2 0 0
Tax	41 0 0	41 0 0	28 17 6	46 2 6	41 0 0	5 2 6
Boiler Insurance	2 14 11	2 14 11	—	2 14 11	2 14 11	—
Water	90 13 0	90 13 0	—	80 14 0	80 14 0	—
Electricity	26 1 2	26 1 2	—	28 5 10	28 5 10	—
Plant repairs	73 18 7	73 18 7	—	82 12 4	82 12 4	—
Oil, tools and sundries	30 17 0	26 9 0	4 8 0	45 3 9	40 3 9	5 0 0
Rent of tips	36 5 0	—	36 5 0	36 5 0	—	36 5 0
Rent of Auty's tip	6 15 0	—	6 15 0	—	—	—
Total Expenditure	2523 5 0	2327 10 2	205 14 10	2387 1 10	1974 11 6	412 10 4
Total weight of refuse disposed	9461 tons	6254 tons	3207 tons	8746 tons	5731 tons	3015 tons
Cost (gross) per ton of refuse disposed	5/4d.	7/5½d.	1/3½d.	5/5½d.	6/10d½.	2/9d.

DISPOSAL OF REFUSE (Continued).

INCOME.	Year ended 31.12.29.			Year ended 31.12.30.		
	Total	Incineration	Tipping	Total.	Incineration.	Tipping
Use of steam	200 0 0	200 0 0	—	200 0 0	200 0 0	—
Sale of scrap metal ...	29 16 0	29 16 0	—	35 8 5	35 8 5	—
Proportion of wages etc.	96 15 0	27 9 2	69 5 10	65 7 2	—	65 7 2
Total Income	326 11 0	257 5 2	69 5 10	300 15 7	235 8 5	65 7 2
Net cost of Disposal & Destruction of refuse	2196 14 0	2070 5 0	136 9 0	2086 6 3	1739 3 1	347 3 2
Total weight of Refuse disposed	9461 tons	6254 tons	3207 tons	8746 tons	5731 tons	3015 tons
Net cost of Disposal per ton	4/8½d.	6/7¼d.	10d.	4/9½d.	6/0¾d.	2/3½d.

SUMMARY.

District—Borough of Batley, Yorkshire.	1929.	1930.
Population	34,550	34,550
Number of houses	9,915	9,925
Weight of refuse collected	9,461 tons.	8,746 tons.
Weight of refuse collected per house	19.08 cwts.	17.62 cwts.
Weight of refuse collected per 1,000 of population	273.83 tons.	253.14 tons.
Net cost of collection of refuse	£3,981	£3,644
Net cost of disposal of refuse	£2,196	£2,086
Net cost of collection of refuse per ton	8/5d.	8/4d.
Net cost of disposal of refuse per ton	4/8½d.	4/9½d.
Net cost of collection and disposal of refuse per ton	13/1½d.	13/1½d.
Average distance of haul (hilly district)	1 mile.	1 mile.
Method of disposal ... Incineration 66%. Controlled tipping 34%.		
Type of haulage—Collection 1 S.D. Freighter; 7 horses and carts.		
Disposal 1 horse and cart.		

UNIT COSTS.	COLLECTION.		DISPOSAL.	
	1929.	1930.	1929	1930.
Net cost per 1,000 houses	£401.51	£367.15	£221.48	£210.17
Net cost per house	8/0½d.	7/4d.	4/5d.	4/2½d.
Net cost per 1,000 population	£115.22	£105.46	£63.56	£60.37
Net cost per head of population	2/3¾d.	2/1¼d.	1/3½d.	1/2½

H. HORNBY,

Senior Sanitary Inspector.

Medical Officer's Department, Batley,

February, 1931.

**WORK OF SANITARY INSPECTORS UNDER ARTICLE 19 OF
THE SANITARY OFFICERS' ORDER, 1926.**

DESCRIPTION OF WORK CARRIED OUT YEAR 1930.

Total number of inspections made 11,239

Details:—	Primary.		Re-inspections.
	Day.	Evening.	
Housing (I. of D.) Regs.	74	—	323
Re sanitary defects	1134	—	3537
Infectious Diseases	2241	247	23
Verminous and dirty houses	96	—	61
Overcrowding	50	—	73
Re water supply	10	—	14
Common Lodging Houses	10	—	—
Factories	7	—	2
Workshops	79	—	5
Workplaces	1	—	2
Bakehouses	34	—	4
Drains inspected	314	—	23
Drains tested	113	3	1
Smoke Observations	227	—	—
Factories (Smoke Nuisance)	33	—	—
Offensive Trades	7	—	—
Stables	11	—	2
Swine, fowls and other animals	12	—	4
Tents, vans and sheds	18	—	—
Schools	37	—	1
Tips and plots of waste ground	75	—	—
Sewers, etc.	21	—	1
Rat infested premises	6	—	—
Miscellaneous visits	451	6	5
Slaughterhouses	1015	30	—
Meat shops	178	64	—
Provision and other food shops	11	—	—
Fried Fish and Chip Shops	69	—	—
Ice Cream Premises	19	—	—
Dairies and Milk Shops	101	—	—
Cowsheds	159	—	—
Markets	50	36	—
Sample of Food and Drugs	109	—	—
Totals	6772	386	4081

Informal Notices served	525
Informal Notices complied with	326
Statutory Notices served	163
Statutory Notices complied with	129
Number of complaints received	164

SMOKE ABATEMENT.

This section has been compiled by Mr. Harold Hornby, Senior Sanitary Inspector:—

The general position in relation to smoke abatement having been stated at length in the Annual Report for 1928, it is proposed to refer only briefly to it in this report.

The number of observations taken was 227, as against 190 for the previous year. Engineers and firemen were interviewed on 45 occasions and 20 notices were forwarded to offending firms.

The accompanying table of smoke observations shews fairly satisfactory results so far as a casual check on a particular chimney for a limited number of minutes will indicate. It will be realised that a number of chimneys which appear quite good according to the table would not shew such satisfactory results had the observations been taken at periods when nuisances were particularly liable to occur, that is, when starting up at early morning or after the mid-day break, or in the case of fluctuating loads when the steam demand suddenly fell or rose according to circumstances. Many smoke nuisances arise locally not from difficult conditions of working but from dirty fires with the fuel heaped up at the front of the furnace, the back of the firebars being uncovered and thus admitting cold air at a wrong point.

As experience advances in the cause of smoke abatement, all the more does it become clear that real progress will result only by the interest and public spiritedness of the whole population and that little good can be expected by the repression of a few offenders. Education is thus being more widely adopted as the best weapon with which to counter the evil of smoke pollution. This principle is recognised by the Sixteenth Annual Report of the Department of Scientific and Industrial Research on the investigation of Atmospheric Pollution recently issued, of which the following is an extract:—

“ In Liverpool, provision has been made for lectures delivered by competent persons having engineering experience, health officers, etc., and for the free distribution of a monthly publication “ Better Health ” in which the economic and hygienic advantages of smokeless fuels are emphasised.”

So far as the limited methods at our disposal would allow us we have attempted by publicity during the year to work on the

lines referred to. It can still be said with truth that if only people concerned with the burning of coal fuel would master the elementary principles of combustion and introduce such knowledge into daily practice, at one stroke the atmosphere would be cleansed of enormous quantities of soot, injurious hydro carbons and tarry acids.

The class for stokers conducted at the Technical College is doing much to introduce a knowledge of fuel economy and boiler efficiency amongst employees in whose hands lies a great power for good in connection with the abatement of industrial smoke.

Employers, generally, possibly because of more immediate difficulties arising from present commercial adversity, seem to give the matter little interest, though the possibilities of fuel economy offered by smoke abatement, would appear to recommend themselves wherever means of saving are desired. When it is remembered that in any efficient furnace burning coal fuel, only 8 per cent. of the fuel should be paid for in terms of coal, whilst 92 per cent. is free in terms of air, the proposition to make all boiler furnaces efficient would appear to be financially attractive, in addition to being cleanly. Industrial smoke abatement is simply the art of making full and proper use of that 92 per cent. of air referred to. This involves not just the haphazard admission of large quantities of air into furnaces but rather the introduction of just the correct amounts under proper physical conditions with special relation to temperature.

Much can be done by a simple adjustment to the furnace of a Lancashire or Cornish boiler. The Corporation Baths may be cited as an instance in this respect. A recent inspection when the plant was prepared for boiler examination indicated that formerly the bridge had been constructed so high in the tube as to minimise the available natural draught; also that the grate area was too large in relation to other factors concerned. By simply shortening the grate area by about 15in. and building the bridge to a proper design, the boiler gives better steaming results, the furnace is easier to manage, smoke emission has been curtailed and there is a 6 per cent. saving in fuel. It can be said with conviction that many premises working a single boiler inefficiently could obtain similar or better results with a little thought and effort.

As regards domestic smoke, whilst raw coal holds the field as the favourite fuel in the home, little improvement can be expected. Electricity, gas and smokeless fuel are used as alternative means of heating and cooking to a small and slowly increasing degree, but their use has not yet been sufficient to result in any apparent impression so far as smoke abatement is concerned. Not until there appears a fuel offering equal results at a cheaper all-round cost will the average householder forsake the use of raw coal. This simple fact explains why the movement to get rid of domestic smoke has not made more rapid progress. If by education the public can be persuaded to pay reasonably for the advantage of clean air, then no doubt many householders will adopt alternative fuels to raw coal in spite of an increased cost.

H. HORNBY.

SMOKE OBSERVATIONS, 1930.

Chimneys.	Number of Observations.	Total mins. Observations taken.	Av. mins. of dense black smoke calculated upon obser-	
			Av. mins. of dense black smoke calculated upon obser-	Av. mins. of dense black smoke calculated upon obser-
			taken.	taken.
Alexandra Mill	4	120	.81	4.31
Anchor Mill	9	250	Nil.	1.33
Batley Corporation—				
Electricity Works	8	214	.5	.06
Public Baths	6	180	Nil.	Nil.
Batley Co-op. Slaughterhouse ...	1	30	Nil.	Nil.
Bankfoot Mill	10	280	.7	.8
Bankfoot Foundry Co., Ltd. ...	1	30	Nil.	Nil.
Brighton Mill	1	30	Nil.	Nil.
Blakeridge Mill	8	240	Nil.	Nil.
Bottoms Mill—(low chimney) ...	3	90	.72	.34
(tall chimney) ...	2	60	Nil.	.34
Branch Road Mill	5	150	Nil.	.2
Brookroyd Mill	7	210	.07	.43
Carlinghow Mill (Burrows) ...	7	210	Nil.	Nil.
Carr Top Mill	1	4½	2	2.5
Chapel Fold Mill	5	124	Nil.	1.95
Cheapside Mill	11	330	.18	.23
Dale Street Mill	4	120	.4	1.9
Dewsbury & District Laundry	3	90	Nil.	2.08
Dock Ing Mill	5	150	.4	.5
Fountains Mill—(low chimney)	3	90	Nil.	Nil.
(tall chimney) ...	3	90	Nil.	Nil.
Healey Lane Mill (S. Sykes)	2	34½	Nil.	2.25
Hick Lane Mill	10	300	.1	Nil.
Hick Well Mill	4	120	.5	.75
Highfield Mill	4	120	.21	.25
Little Orme Mill	6	180	.17	.75
Livingstone Mill	4	105	Nil.	2.5
New Ing Mill	4	120	.3	.61
Ings Mill	6	120	.33	.5
Old Mill	1	30	Nil.	Nil.
Park Lane Mill	9	270	.05	.66
Perkins Oil Works	3	150	Nil.	Nil.
Printworks	7	210	.14	4.14
Providence Mill—				
Smithies Moor Lane	7	210	.14	.6
Providence Mill, Staincliffe ...	4	120	Nil.	1.27
Queen Street Mill	3	90	.34	1.34
Saville Mill	3	90	Nil.	2.14
Spring Mill, Staincliffe	4	120	.55	1.02
Spring Mill, Carlinghow Lane	3	90	Nil.	Nil.
Springwell Mill	3	90	1.16	.92
Staincliffe Low Mill	3	90	.16	1.33
Talbot Street Reed Works ...	2	60	Nil.	Nil.
Victoria Mill, Batley Carr ...	9	247	.44	1.3
Victoria Mill, Carlinghow ...	6	180	Nil.	.83
Victoria Oil Works	1	30	Nil.	1.5
Warwick Road Brickworks ...	4	120	Nil.	.61
Wensleydale Mill	7	210	Nil.	.14
Wheatercroft Mill	1	4½	4.5	Nil.
Total No. of Observations	227			

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE-LAWS OR REGULATIONS.

COMMON LODGING HOUSES:—

No. of houses, 2; Keepers, 2; Inspections, 10.

The houses are small concerns consisting of five sleeping rooms capable of accommodating 46 lodgers in the one case and four sleeping rooms used by 21 lodgers in the other.

Both premises are only poor as regards the arrangement of the various rooms and conveniences and general suitability for the purposes used.

In one case strict attention to cleanliness and general order compensated to a considerable degree for many constructional deficiencies. The other house, though not so dirty or unwholesome as to constitute a nuisance, is run on such indifferent lines as to barely comply with the Byelaws. The lodgers, too, in the latter house, appear an irresponsible set of people who are not particular about damaging drains, sanitary conveniences and other fittings. This house would benefit considerably if placed under the charge of a keeper of clean and orderly disposition and possessed of sufficient strength of character to enforce his demands as to proper conduct upon the lodgers.

The keepers continue to observe the practice of handing in daily to the Public Health Department statements shewing the names of all lodgers and the town or other place which each last slept in. No case of infectious disease during the year was found to have any connection with the lodging houses in the town.

SLAUGHTERHOUSES:—

No. of premises, 13; Inspections, 1,045.

It was mentioned in the Annual Report for 1929 that in consequence of difficulty which had arisen in correcting the registers as to the classification of the slaughterhouses in the town between the three categories "registered," "licensed prior to 1890," and "annually licensed," a special sub-committee had been set up to investigate the history and period of occupation of every slaughterhouse. The sub-committee met on two occasions and considered evidence from the old registers dating so far back as 1853, together with verbal information offered by Councillors who are known to have been long resident within the town. The

amount of reliable information collected was too small and the time devoted to the matter too limited to enable the sub-committee to make a report. A re-constituted sub-committee was appointed by the Public Health Committee at its meeting held on the 17th December, 1930, to continue the investigations. It is hoped that in due course the sub-committee's findings will result in the register being put on a proper and accurate basis. Three members were appointed, of whom two are butchers. The fact whether a slaughterhouse is registered or licensed is a matter of great importance from the legal aspect, and may in certain circumstances be the cause of compensation having to be paid by the local authority to butchers who own registered slaughterhouses. This does not apply in the case of licensed slaughterhouses.

The poor condition and lack of general suitability of our local slaughterhouses was fully reported on pages 36 and 37 of the Annual Reports for 1927 and 1928 respectively and periodically during the last twenty years. The two main evils influencing the hygienic conditions under which meat is prepared in our local slaughterhouses are (1) that being only "one roomed" premises, carcasses prepared first on any occasion of slaughter are subjected to the warm, humid and unwholesome emanations arising from the opening of animals slaughtered later. This is most prejudicial to the ultimate quality of the meat, and is especially marked in premises where pigs are slaughtered and considerable volumes of water vapour arise from the scalding process; (2) that the emptying and cleaning of stomachs and intestines in slaughterhouses wherein prepared carcasses are present is a reprehensible practice which should be stopped. Not only is the air in contact with the dressed carcasses rendered most foul by this operation, but the danger of actual splashing of the meat with intestinal fluid arises and not infrequently occurs. When it is remembered that organisms capable of rendering meat definitely poisonous are normally present in the alimentary tract of perfectly healthy animals, the danger to public health will be fully appreciated. Unfortunately, the Public Health (Meat) Regulations, 1924, appear to consent to this dangerous practice; Article 12 states "No gut scraping, tripe cleaning, ... other than is involved in the slaughter and the dressing of carcasses shall be carried on in any slaughterhouse." The words underlined take away any power to compel a discontinuance of the old established method of opening stomachs and emptying intestines in the same place as, and in close proximity to, carcasses prepared for human food. If the butchers would note what is

said here and rectify the matter by voluntary action, their efforts would be appreciated as an earnest of their good intention to uplift the standard of food hygiene existing in the town with special regard to the preparation of butchers meat.

OFFENSIVE TRADES :—

No. of premises, 3.

No. of inspections, 7.

The inspections given above do not represent the actual number of inspections made, as two important premises are carried on in conjunction with slaughterhouses and visits are included in inspections under that heading. The processes carried on are Tripe Boiling, Fat Rendering and Gut Scraping. The premises are, in the main, satisfactory, with the exception of a tripe boiling and fat rendering premises at the rear of Commercial Street. As the occupiers have now had sufficient time to come to a decision and form their policy as to the improvements they are prepared to effect to put their premises in the condition required by the Byelaws with respect of Offensive Trades which came into operation on the 3rd October, 1929, it is proposed to require the necessary works to be carried out at an early date.

FRIED FISH SHOPS :—

No. of premises, 61.

No. of inspections, 69.

No. of premises improved, 11.

In view of the coming into operation of the requirements of the Borough of Batley (Offensive Trades) Confirmation Order, 1928, fried fish shops are now officially regarded in the Borough as one of the miscellaneous businesses controlled by the general public health law with regard to Offensive Trades and the Byelaws referred to in the previous section

It will be observed that the number of premises improved indicates a reasonable effort on the part of the Department to raise the general sanitary standard to something approximating to the Byelaws.

As regards newcomers into the trade the present practice is for the Senior Sanitary Inspector to view the proposed premises with the applicant. If such appear generally suitable and the applicant is prepared to carry out the works indicated, the Public Health Committee is asked to grant the necessary permit for the trade to be carried on, subject to the premises being made to the satisfaction of the Medical Officer of Health before business is

commenced. This system works quite well, and whilst securing the greatest sanitary advantage, at the same time obviates any difficulty which might arise through a proposed trader being turned down by the Corporation after he has expended money on works. Wherever new buildings are proposed in connection with Offensive Trades, the Borough Surveyor is requested to advise his Committee to reject the plans if the Offensive Trades Byelaws are not properly complied with.

COWSHEDS :—

Number of Cowsheds	32
Number of Cows	261
Number of Cowkeepers	17
Number of Cowkeepers who are also retail purveyors of milk	8
Number of Retail Purveyors with premises in the Borough	44
Number of Retail Purveyors with premises outside the Borough	33

It is pleasing to record that during the year definite progress was made in bringing certain of what were formerly the least satisfactory dairy farms up to the standard of fitness required by the Milk and Dairies Order 1926. The following is a brief statement of the improvements effected during the year :—

HOLLY CROFT FARM.

Old cowshed abolished and the building re-arranged to form a modern cowshed fitted with rear walk, manure channel, standings, trough and feeding passage cast in situ in impervious concrete; also furnished with tubular stall divisions and adequate means of natural lighting and ventilation provided. Internal walls rendered with portland cement and made cleanly and impervious. Various other improvements carried out to drains, pavements, and manure midden. The cowshed was also fitted with electric light.

LEES HOUSE FARM.

Two existing cowsheds improved and re-conditioned. Floors taken up and new floors consisting of rear walk, manure channel and standings and feeding passage cast in situ in impervious concrete. Modern glazed stoneware troughs and tubular divisions fixed. Improvements to natural lighting and ventilation effected. New drains and liquid manure tank constructed. Various other improvements carried out to pavements, roofs, eave-gutters, fall-pipes, etc.

THE FARM, HEYBECK.

Old cowshed abolished and the building enlarged and re-arranged to form a modern cowshed fitted with central walk, manure channels, standings and feeding passages cast in situ in impervious concrete. Modern glazed stoneware troughs and tubular divisions fixed. Improvements to natural lighting and ventilation effected. New dairy provided. Drains to be re-constructed and arranged to discharge into a liquid manure tank. Various other improvements to be carried out.

MANOR FARM, SOOTHILL LANE.

Large central yard paved in impervious concrete. Improvements to lighting, ventilation and drainage of cowsheds effected. Dairy improved and properly isolated from communication with cowshed.

WHITE LEA FARM.

In consequence of the owner's definite refusal to improve this insanitary and unsuitable dairy farm, the Public Health Department was reluctantly compelled to threaten the occupier with proceedings under the Milk and Dairies Order, 1926, if occupation continued after the "Lying-out" season of 1930. As a result of this action the cows have been disposed of and the dairy farm closed as such. This drastic action is much regretted and was only resorted to after years of unavailing effort to get reasonable improvements effected; and after it became clear that the owner could not be prevailed upon to modify his intention of taking no constructive action in the matter.

GENERAL.

It is confidently expected that in due course the efforts of the Department to get all cowshed and dairy premises in the Borough improved and brought up to the standard required by modern public health legislation will meet with success. For the 1931 programme of improvements, undertakings have been given for the improvement of lighting and ventilation of the cowsheds and the construction of a new dairy at one farm and the re-construction of a cowshed at another. An undertaking has also been given to re-construct a further cowshed at another farm in 1932.

The improvements briefly indicated if modest in extent nevertheless represent a determined effort to remedy deficiencies of long standing in the local cowsheds and dairies, and it is hoped that the

good work achieved will not only result in greater encouragement to those actively engaged in the trade, but will in addition achieve a higher standard of cleanliness and purity in the milk retailed locally.

DAIRIES AND MILKSHOPS:—

No. on the Register, 30. Inspections, 101.

In addition to the improvements mentioned in the last section with regard to dairies occupied in connection with producers' premises, two improved dairies have been constructed in lieu of unsatisfactory premises formerly occupied by retail purveyors of milk, and a third is in course of construction.

The names of the retail purveyors of milk concerned in the improvements referred to are:—

Brandon Ellis, Greenhill Farm, 212, Commonsides, Hanging Heaton.

Herbert Leach, Hillside Farm, Brownhill, Batley.

Morton and Richardson, Occupation Lane, Staincliffe.

An existing dairy occupied by Edgar Reed has also been improved.

A fair proportion of retailers on the register consist of grocers and other shops from which milk is sold in sealed bottles only. Difficulty often arises through small tradesmen acting in ignorance by selling bottled milk and neglecting to have their names entered in the milk retailers' register kept by the Corporation.

ICE CREAM PREMISES:—

No. of premises, 26. Inspections, 19.

No. of premises improved, 2.

It continues to be observed in the town that ice-cream for sale must not be made in dwelling-houses or other unsuitable places.

Generally, vendors seek the advice and approval of the Department before commencing to make ice-cream in any place which has not previously been approved. In addition to the improvements enumerated above two new premises were approved. One is fitted with the most modern appliances. This trade, as equally applies to milk, meat and other foods, should be conducted in accordance with the best hygienic principles, if it is to advance, instead of retard, the interests of public health. That being so, it is important that employers should discriminate in favour of healthy persons practising cleanly habits when choosing servants.

To stress this point, it may be mentioned that during the summer season a young person known to be suffering from tuberculosis was discovered assisting in the manufacture and sale of ice cream in the town. The matter was rectified when the danger was pointed out to his employer.

BAKEHOUSES :—

No. of premises, 34. No. of Inspections, 38.
No of premises improved, 10.

These have been kept under observation and attention given to nuisances or defects as and when such matters have arisen.

RATS AND MICE (DESTRUCTION) ACT, 1919.

There have been only six inspections of rat infested premises, resulting in the necessary action being taken by occupiers.

The comparative freedom of the town from rats did not justify an intensive campaign during National Rat Week, 1930.

Advertisements inserted in the local Press inviting complaints to the Department during the week mentioned resulted in no response.

An article on rats and their dangers, written by the Senior Sanitary Inspector, appeared in the Press and the local edition of "Better Health."

MISCELLANEOUS (OTHER SANITARY CONDITIONS REQUIRING NOTICE) :—

There has not been any occasion during the year to register any dwelling-house as Houses-let-in-Lodgings, though Byelaws are in force in the Borough. The Byelaws with respect to Tents, Vans, Sheds and similar structures used for human habitation continue to be useful. As regards Underground Sleeping Rooms, the Regulations adopted in 1927 may be placed amongst those resulting in the greatest practical service to that section of the people living under the least desirable conditions, that is, so far as amenities influencing health are concerned. These regulations act as a definite standard to work by when improvements are indicated to Owners and in this sense they exert a real influence for good, where most wanted, in an informal and unobtrusive manner. It is worthy of note that Sec. 62 of the Housing Act, 1930, gives added force to these Byelaws by stating "In determining for the purpose of this Act whether a house is fit for human habitation,

regard shall be had to the extent, if any, to which by reason of disrepair or sanitary defects the house falls short of the provisions of any **byelaws** in operation in the district, or of the general standard of housing accommodation for the working classes in the District."

ARRANGEMENTS FOR DISPOSAL OF THE DEAD :—

The Batley Cemetery, owned by the Corporation, is sufficient for immediate requirements. Cremation, which is the most hygienic method of disposal of the dead, is making much progress in this, and other, countries. In any extension of facilities in the future this method, which is of great antiquity, should have consideration, in addition to other ideas.

SCHOOLS :—

Circular 1119 of the Ministry of Health dated 18th June, 1930, in accordance with the terms of which this report is compiled, says:—"The sanitary condition and water supply of schools, especially public elementary schools, should be reported on; the action taken in relation to the health of the scholars and for preventing the spread of infectious disease (cf. Memorandum on Closure of and Exclusion from School, 1927)." A footnote states "This paragraph applies to all Medical Officers of Health in whose areas schools are situated." A separate annual report is made to the Batley Education Committee by the Medical Officer of Health acting as School Medical Officer. Until 1925 it was bound with the annual report of the Medical Officer of Health. Since then it has been entirely separate, at the demand of the Education Committee. The following is an extract from the annual report for 1930 of the School Medical Officer :—

"A complete review of the hygienic conditions of the schools in the area is contained in the report of the School Medical Officer for the year 1925, pages 80 to 113. Five years having elapsed, a complete survey has again been made. The reports are extensive. They are not published herewith for that reason, but are available for reference whenever the Committee may desire to become acquainted with the existing conditions in their schools as viewed from the hygienic standpoint."

The School Medical Officer has acted latterly as Medical Officer of Health through the Public Health Committee in various instances where the sanitation of school buildings is involved, this being part of his statutory duties.

At the 41st Congress of the Royal Sanitary Institute, held at Margate in June, 1930, at which the Batley Corporation was represented by the Chairman of the Public Health Committee, Alderman Milnes, and the Medical Officer of Health, the following resolutions proposed by Dr. Picken, Medical Officer of Health of Cardiff, and seconded by Alderman J. Halstead, J.P., a prominent member and ex-Mayor of the Dewsbury County Borough Council, were approved, and copies sent to the Ministry of Health:—

(1) "That in the opinion of this Congress it is desirable that the Minister of Health should exercise directly the control over the schemes of local authorities for attending to the health and physical condition of school children which he is empowered to exercise by Section 3 of the Ministry of Health Act, 1919, and Section 16 of the Education Act, 1921, and it is recommended that the Council of the Institute make representations to the Ministry of Health accordingly."

(2) "That in the opinion of this Congress the law should be amended so as to enable local authorities, which are authorities for education, to transfer if they so desire, the management of the School Medical Service and the preparation of all schemes in relation thereto from their Education Committee to the Public Health Committee, and it is recommended that the Council of the Institute make representations to the Government accordingly."

RAG FLOCK ACTS, 1911 and 1928—

No samples were taken during the year. There are premises in the district on which rag flock is manufactured, used and sold

HEALTH EDUCATION:—

The work which was begun in March, 1929, to educate the public in health matters has been continued throughout the year. In addition to leaflets advancing the cause of personal and general cleanliness, dental hygiene, proper handling and storage of foods, precautions to be taken in dealing with outbreaks of infectious sickness and many other health topics, one thousand copies monthly of "Better Health," a journal controlled by the Central Council for Health Education set up by the Society of Medical Officers of Health, have been distributed. The Public Health, Maternity and Child Welfare and Education Committees not having seen fit to accord support, arrangements were made, as previously ex-

plained, by which these valuable little magazines are printed and published without any cost to the Town Council and their future issue is dependent entirely on the generous support of local and other advertisers.

In addition to the excellent matter on various subjects relating to health in all its many aspects, the Department is allotted space wherein subjects specially applicable to local circumstances are discussed and explained. Thus, opportunity was taken during 1930 to publish articles written by Mr. Harold Hornby, M.R.S.I., the Senior Sanitary Inspector who, from the outset, has acted as local editor, on the subjects undermentioned for the benefit of the local public:—

Infectious Diseases.	Flies and their dangers.
Meat Inspection.	The verminous house.
Shell fish and their dangers.	Public Health and the Houses we live in.
Ventilation and dangers of im- pure air.	Food and chemical preservatives.
Refuse, Health, Economy and Efficiency.	Rats and their dangers.
Food, Drugs and Purity.	Food Refrigerators and Pub- lic Health.

“ Better Health ” is appreciated by members of every section of the community, and the number of readers who look forward to receiving their copies of future issues continues to increase. The local Press has rendered every assistance by re-printing articles and extracts from time to time in the two local newspapers, and thus in a public spirited way helped the Department to spread information on matters of health amongst a more numerous public than our own literature would otherwise have enabled us to do.

Excellent talks on public health have also been given by Mr. Hornby as opportunity has occurred to members of Clubs, Educational Guilds and other gatherings.

The steady progress which is being made by health propaganda locally would be much stimulated if the Corporation could be persuaded to take an interest in the matter.

HOUSING.

(A) STATISTICS.

Number of New Houses erected during the Year :—

- (A) Total (including numbers given separately under (B)).
- (i) By the Local Authority Nil.
 - (ii) By other Local Authorities Nil.
 - (iii) By other bodies and persons 28
- (B) With State assistance under the Housing Acts :—
- (i) By the Local Authority.
 - (a) For the purpose of Part ii of the Act of 1925 ... Nil.
 - (b) For the purpose of Part iii of the Act of 1925 ... Nil.
 - (c) For other purposes Nil.
 - (ii) By other bodies or persons.

1 INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

	No. of Dwelling- houses.	No. of Inspec- tions made.
(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) and the number of inspections made ...	1208	3860
(2) Number of dwelling-houses (included under sub-head (1) above), which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made	74	397
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	18	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	919	—

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	742	—
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3. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A—Proceedings under Section 3 of the Housing Act, 1925 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	31	—
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(2) Number of dwelling-houses which were rendered fit after service of formal notices—		
(a) By Owners	*47	—
(b) By Local Authority in default of owners	5	—
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil.	—

B—Proceedings under Public Health Acts:—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	88	—
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—		
(a) By owners	79	—
(b) By Local Authority in default of owners	Nil.	—

C—Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925, and Housing Act, 1930:—

(1) Number of representations made with a view to the making of Closing Orders	18	—
(2) Number of dwelling-houses in respect of which Closing Orders were made	16	—
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit ..	4	—
(4) Number of dwelling-houses in respect of which Demolition Orders were made	20	—
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	16	—

4. NUMBER OF HOUSES OWNED BY THE LOCAL AUTHORITY, distinguishing those built in the last two years and held under (1) Part iii of the Housing Act, 1925, (2) Part ii of the Housing Act, 1925, and (3) other powers ...	368	—
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* NOTE.—The excess of notices complied with over notices is due to notices brought forward from 1929 and complied with in 1930.

(B) HOUSING CONDITIONS.

1. General observations as to Housing conditions in Batley were made in reports to the Town Council by the Medical Officer of Health dated 15th and 24th November, 1930, with special reference to the Housing Act, 1930, copies of which were sent to the Ministry of Health, as is required by statutory regulations. These reports inter alia deal with the standard of houses, the prevalent types, age and approximate numbers and general soundness of the several types, together with information as to prevailing forms of defects and of prevailing bad conditions resulting from overcrowding.

2. (a) Sufficiency of supply of houses was also referred to in these reports, it being stated that in the opinion of the Medical Officer of Health not less than 1,500 houses are required in Batley, viewing the subject from the hygienic aspect. The financial position is the concern of others. The Corporation's proposals for meeting the circumstances were sent to the Ministry, as required by the Housing Act, 1930.

(b) No important change in population has occurred during recent years apart from the Registrar-General's figures, which estimate the population of Batley in 1930 as 34,550. The average for the ten years 1921 to 1930 is 35,765. No variation from this basis is anticipated in the future unless there should be a revival of trade and the erection of factories or mills.

(c) There are no special difficulties in the way of providing suitable sites for new houses.

3. OVERCROWDING. This is considerable.

(a) The basis on which the estimate has been made is explained in the following quotation from the special reports above-mentioned:—

“Reference may be made to the annual reports of the Medical Officer of Health during the last 20 years. In 1914 I made the following remarks:—

“On December 31st, 1914, the population of Batley in round figures was at least 37,000. If we take the census figures at 19.3 per cent. of the population living under overcrowded conditions it shews roughly at least 7,000 persons require provision making for them in order that the overcrowding may be abated. A reasonable number of occupants for a four-roomed artisan's dwelling is four. On this basis no less than 1,750 houses are required according to the Census.”

It is not possible to give the Census figure for overcrowding in Batley since 1921, when it was 18.8 per cent. of the population. The next census will be taken in 1931. The following table may be useful, as it gives the accommodation in the homes of scholars attending the Batley Elementary Schools during the year 1925, about midway between the last census period and the present. All those shewn to the right of the thick line are living under overcrowded conditions.

ACCOMMODATION IN THE HOME OF BATLEY SCHOOL CHILDREN EXAMINED DURING 1925.

No. of rooms in house	Number of Persons per Tenement												
	1	2	3	4	5	6	7	8	9	10	11	12 and upwards	Total
1		1	1	2	2	1							7
2		3	69	121	98	70	61	27	12	5	2	1	469
3		4	61	107	121	88	71	45	21	18	5	1	542
4		1	14	54	44	29	29	15	6	11	2	3	208
5 & upwards			13	39	48	35	28	31	13	6	8	3	224

During the five years 1925 to 1929 inclusive the Health Visitors and School Nurses in the course of their routine duties visited 3,152 houses in which non-notifiable infectious disease occurred amongst scholars or children below school age. An examination of the records discloses the fact that 32 houses consisted of one room, 1,041 houses of two rooms, and 1,183 houses of three rooms only. Four and five-roomed houses numbered respectively 453 and 348, six and seven-roomed houses 71 and 17, whilst there were only 7 houses visited which consisted of 8 rooms or more. It is obvious, therefore, that in 2,256 of these houses—those consisting of one to three rooms—there must be considerable overcrowding, as is well known to be the fact."

(b) CAUSES. The chief causes of overcrowding in Batley are (1) the low standard of housing in the town caused by the methods of many years ago, (2) the mode of life of a proportion of the population who do not desire the conditions of overcrowding in which they themselves live to be altered, and strenuously resist any proposals made with this object, (3) inability of many who desire better accommodation to pay the rents of Corporation houses. The fact that there are few names on the waiting list is no index to the extent of the need for modern housing accommodation, but is due to lack of means to pay the existing rents. If it should ever be possible for Corporation houses to be built to let at lower rents than at present there would be an immediate increase in the number of prospective tenants. The present rents of Corporation houses are—Parlour Type 10s. per week, plus 7s. 6d. rates=17/6, Scullery Type 8/- per week, plus 6/- rates=14/-.

(c) The following are examples of a number of cases where special action has been taken during the year 1931 to deal with overcrowding. In those which have not been before the Magistrates, notice to abate the nuisance has been served.

PREMISES.	NO. OF ROOMS.	REMARKS.
No. 64, Cross King St., Batley Carr	One living room and one bedroom. Nine occupants not members of the same family	Case heard at Batley Police Court, 30th June, 1930. Magistrates found case proved and made an Order for the abatement of the nuisance within twenty-eight days and for payment of costs.
No. 7, Villiers St.	One living room and one bedroom. Nine occupants.	Case heard at Batley Police Court, 20th October, 1930. Magistrates found case proved and made an Order for the abatement of the nuisance within twenty-eight days and for the payment of costs.
No. 9, Naylor's Fold, off Town St., Batley Carr	One living room and one bedroom. Nine occupants not members of the same family	Case heard at Batley Police Court, 20th October, 1930. Magistrates found case proved and made an Order for the abatement of the nuisance within twenty-eight days.
No. 1, Goodalls Fold, Upper Commercial St.	One living room and one bedroom. Eight occupants.	Case heard 26th Jan., 1931, in the Batley Police Court. Magistrates found case proved and made an Order for the abatement of the nuisance within twenty-eight days and for the payment of the costs.
No. 14, Albert Sq., Batley Carr	One living room and one bedroom. Nine occupants.	
No. 67, Back Albert Street, Batley Carr.	One living room and one bedroom. Ten occupants.	

PREMISES.	NO. OF ROOMS.
No. 33, Victoria Street, Batley Carr.	One living room and one bedroom. Six occupants.
No. 4, Court 4, King Street, Batley Carr.	One living room and one bedroom. Eight occupants not members of same family.
No. 68, Common Road	One living room and one bedroom. Thirteen occupants.
No. 33, Cresswell Lane	One living room and two bedrooms. Eleven occupants not members of the same family.
No. 45, Forrester's Court, Common Road.	One living room and one bedroom. Ten occupants.

4. FITNESS OF HOUSES.

(a) The difficulties found in action under the Public Health Acts or under Section 3 of the Housing Act, 1925, are much aggravated by the fact that the prevalent type of house occupied by the working classes in the district is of the back-to-back class, with houses overcrowded on site. In consequence it is nearly always impracticable to specify such improvements as will approximate to a minimum standard of lighting and ventilation. To a less degree the same difficulties arise in connection with the provision of separate sanitary accommodation, provision for proper storage of food, and proper facilities in the way of sinks, lavatories, etc. Very few working-class houses in the district are fitted with baths and hot water apparatus. Most of the houses have no damp-proof course, with a result that the exclusion of dampness from occupied rooms often presents a most difficult feature.

Owing to widespread industrial depression, which has affected this Borough acutely, undue pressure is frequently required to get even the most urgent sanitary improvements effected.

(b) Special measures suggested by the Medical Officer of Health in relation to the particular types of insanitary property prevailing are the provision of 1,500 new houses to enable Improvement Areas to be defined and dealt with. So much as lies within the abilities of a staff of three Sanitary Inspectors performing all duties required by the Sanitary Officers' Order, a particular effort is made to deal with the matter of repairs to dwelling-houses according as inspections are made in consequence of complaints, occurrence of notifiable disease, or for other reasons.

(c) Without exception every house in the district has a private internal water supply of satisfactory quality.

(d) Out of a total of 9,925 houses in the Borough, approximately 3,000 back-to-back houses have common water closet accommodation in their own curtilage largely in the proportion of one w.c. to every two houses. With the exception of a few properties on the outskirts which have Pail Closets (7) or Privy Middens (21) the remaining houses have a separate water closet in their own curtilage, but in a number of instances two houses share one W.C. The Corporation's minimum standard is one water closet to two houses. It has often been suggested that the time has now arrived

when every house should have its own water closet. For many reasons the sharing of sanitary accommodation between neighbours is undesirable.

5. UNHEALTHY AREAS. The localities which contain the worst type of houses are particularly portions of Batley Carr, the Queen Street area, the Cobden Street area, and some individual blocks of back-to-back houses in other portions of the town. Many complaints are annually received respecting housing defects, the greater proportion being in these areas. In the special reports previously mentioned the Town Council is recommended to define Improvement Areas and provide sufficient assistance for the proper performance of this work by engaging the services of a fourth sanitary inspector. It is impossible for the existing staff, with the frequent resignations necessitating the whole work falling upon two inspectors for at least two months every time a vacancy arises, to cope successfully with the ordinary routine work, apart altogether from special survey work under the Housing Act, 1930.

6. BYELAWS RELATING TO HOUSES, TO HOUSES LET IN LODGINGS, AND TO TENTS, VANS, SHEDS, ETC. This subject is dealt with under the heading "Miscellaneous" in previous pages.

7. General observations on housing matters not already covered, and on any difficulties experienced in housing administration and the measures taken to meet them are mostly comprised in the preceding remarks. In Batley the trouble appears to arise through the lack of recognition, or definition, of what is a reasonable standard of housing applicable to the Borough. Experience shews that whilst the officials base their definition upon the general requirements laid down in the Housing Manuals issued by the Ministry of Health and confirmed by Sec. 62 of the Housing Act, 1930, this standard is strongly opposed by owners and their representatives and is not usually accepted by the Public Health Committee as its standard when dealing with unfit houses.

CLOSING ORDERS HOUSING ACTS, 1909 to 1928.

Particulars are given on pages 37, 43, 44 and 46a of the Annual Reports for 1926, 1927, 1928, and 1929, respectively. To these the following must be added to shew the position on the 31st December, 1930:—

Situation.	Date of Representation to Public Health Cte.	Date of Closing Order.	Date of Determination of Closing Order.	Date of Demolition Order	Remarks.
19, Norfolk Street	17. 4.29	2. 5.29	—	2. 4.30	Demolished.
21, " "	17. 4.29	2. 5.29	—	2. 4.30	"
23, " "	17. 4.29	2. 5.29	—	2. 4.30	"
25, " "	17. 4.29	2. 5.29	—	2. 4.30	"
21 White Lea Rd	19. 6.29	4. 7.29	—	5. 2.30	"
23, " "	19. 6.29	4. 7.29	—	5. 2.30	"
27, Jail Road	24. 7.29	1. 8.29	—	2. 4.30	"
29, " "	24. 7.29	1. 8.29	—	2. 4.30	"
31, " "	24. 7.29	1. 8.29	—	2. 4.30	"
33, " "	24. 7.29	1. 8.29	—	2. 4.30	"
35, " "	24. 7.29	1. 8.29	—	2. 4.30	"
37, " "	24. 7.29	1. 8.29	—	2. 4.30	"
39, " "	24. 7.29	1. 8.29	—	2. 4.30	"
41, " "	24. 7.29	1. 8.29	—	2. 4.30	"
43, " "	24. 7.29	1. 8.29	—	2. 4.30	"
48, New Street	24. 7.29	1. 8.29	3.12.30	None made	House made fit.
10, Holland St.	13.12.29	1. 1.30	7. 5.30	None made	"
12, " "	18.12.29	1. 1.30	7. 5.30	None made	"
5, Yard 9, Cross Bank Road	15. 1.30	7. 5.30	—	—	"
6, Yard 9, " "	15. 1.30	7. 5.30	—	—	"
18, Coal Pit Lane	15. 1.30	7. 5.30	—	—	"
20, " "	15. 1.30	7. 5.30	—	—	"
234, Healey Lane	19. 3.30	2. 4.30	—	1.10.30	"
236, " "	19. 3.30	2. 4.30	—	1.10.30	"
191, " "	19. 3.30	2. 4.30	—	1.10.30	"
14, East Street	5.16	1. 6.16	—	6. 8.30	"
16, " "	5.16	1. 6.16	—	6. 8.30	"
51, Bunkers Lane	16. 7.30	6. 8.30	—	—	"
55a, " "	16. 7.30	6. 8.30	—	—	"
5, Grace Leather Lane	16. 7.30	6. 8.30	—	—	"
7, " "	16. 7.30	6. 8.30	—	—	"
14, Wards Hill	16. 7.30	6. 8.30	—	—	"
16, " "	16. 7.30	6. 8.30	—	—	"
*20, " "	15.10.30	—	—	—	"
*6, Upper Batley Lane	17. 9.30	—	—	—	"
*8, " "	17. 9.30	—	—	—	"
*11, Fox's Yard, Commercial St.	25.11.30	—	—	—	"
*15, Hume Street	25.11.30	—	—	—	"

*Housing Act, 1930.

FACTORY AND WORKSHOPS ACT, 1901.

1. INSPECTION

of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspector or
Inspector of Nuisances.

Premises (1)	Number of		
	Inspections (2)	Written Notices. (3)	Prosecu- tions. (4)
FACTORIES (Including Factory Laundries)	9	3	—
WORKSHOPS (Including Workshop Laundries)	122	26	—
WORKPLACES (Other than Outworkers' premises)	3	7	—
Total	134	36	—

2. DEFECTS FOUND.

in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects.			Number of offences in respect to which prosecutions were instituted.
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
Nuisances under the Public Health Acts.				
Want of Cleanliness	11	9		
Want of Ventilation	3	1		
Overcrowding				
Want of Drainage of Floors				
Other Nuisances	27	28		
Sanitary Accommodation {	insufficient ...	6	2	
	unsuitable or defective ...	3	4	
	not separate for sexes ...			
Offences under the Factory and Workshop Act.				
Illegal occupation of underground Bakehouse (S. 101)				
Other Offences				
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
Total	50	44		

INSPECTION AND SUPERVISION OF FOOD.

The Senior Sanitary Inspector (Mr. H. Hornby) has compiled a portion of the remarks in this section:—

(a) MILK SUPPLY. There are seventeen producers of milk within the Borough, but no producers of graded milk.

The following licenses to sell graded milk in the Borough were granted during the year:—

Certified Milk, 6; Grade A (T.T.) Milk, 3; Grade A Milk, 2.

Six samples of Certified Milk, one of Grade A (T.T.) Milk and five of Ordinary Milks were bacteriologically examined.

The following table shews the results of examination in order of bacterial purity; the cleanest milk being indicated at the top and the dirtiest at the bottom.

SAMPLES OF MILK BACTERIOLOGICALLY EXAMINED.

Class of Milk.	Age. Hrs.	Temp. °C	Number of Bacteria. per c.c.		Presence of Bacillus. Coli.		Remarks.
			Found.	Standard.	Found.	Standard.	
1. Certified	29	6	1,450	30,000	Neg. 1 c.c.	Neg. 1/10 c.c.	
2. Certified	31	17	1793	30,000	Neg. 1 c.c.	Neg. 1/10 c.c.	
3. Certified	31	8	3,023	30,000	Neg. 1 c.c.	Neg. 1/10 c.c.	
4. Certified	31	8	12,923	30,000	Neg. 1 c.c.	Neg. 1/10 c.c.	
5. Certified	31	14	8,723	30,000	Neg. 1/10 c.c.	Neg. 1/10 c.c.	
6. Certified	31	10	29,660	30,000	Pos. 1/10 c.c.	Neg. 1/10 c.c.	
7. Ordinary	31	14	36,600	None.	Neg. 1/100 c.c.	None.	
8. Ordinary	31	10	37,553	None.	Neg. 1/100 c.c.	None.	
9. Grade A (T.T.)	29	6	78,950	200,000	Neg. 1/100 c.c.	Neg. 1/100 c.c.	
10. Ordinary	31	14	48,533	None.	Pos. 1/100 c.c.	None.	
11. Ordinary	31	14	97,800	None.	Pos. 1/100 c.c.	None.	
12. Ordinary	31	14	65,966	None.	Pos. 1/1000 c.c.	None.	

The table demonstrates in a striking way the superior bacterial purity of Certified Milk, even after allowing for the fact that sample No. 6 fell below the high standard laid down by the Milk (Special Designations) Order, 1923. It will be noted that the results are not arranged in exact order according to bacterial count; the reason for this is that in estimating the relative cleanliness, the result is indicated by considering each bacterial count, together with the information as to the presence or absence of *Bacillus Coli*. Sample No. 12, shewing *Bacillus Coli* in such a small amount as one-thousandth of a cubic centimetre was a seriously contaminated milk. It is interesting that two ordinary milks shewed slightly better results than a sample of Grade A (T.T.). As regards contamination with the germs of tuberculosis, it must be remembered that the figures referred to in the table have no concern with this aspect of the matter. In Certified Milk and Grade A (T.T.) Milk only is there any guarantee that the cows producing are healthy and free from tuberculosis. Further, in Certified Milk only is there any reasonable assurance indicated that the article is both free from dirt and tuberculosis.

Of twenty samples of milk purchased from various retailers during the summer months and examined by the sediment test—that is, estimating the general cleanliness by the amount of staining of a clean white cotton wool pad through which the milk is forced—twelve samples or 60 per cent. were clean, six or 30 per cent. were doubtful, and two or 10 per cent. were definitely dirty. This result indicates an improvement on the figures for the previous year when, tested by the same method, 19 per cent. of the samples were clean, 31 per cent. doubtful and 50 per cent. definitely dirty. This method of testing, though somewhat rough and ready, is not only inexpensive but is proving itself a most useful instrument in securing a steady improvement in the general cleanliness of the local milk supply. Its advantage lies in the fact that in a few moments' time the dirt can be separated from an unclean milk and demonstrated before the retailer's eyes, thus combining a wholesome conviction of the need for improvement with a salutary lesson. Such a method would appear to do much practical good in the case of the retailer who both distrusts and cannot understand a certificate of an examination carried out on otherwise more accurate principles. It may be of interest to remark here that a typically dirty milk examined by the sediment test shews a pad which is stained brown with manurial contamination and also indicates grit, dust particles, fragments of hairs, and

specks of vegetable matter, strained out of the milk in the course of the test.

To summarise briefly the results gained locally by the bacteriological examinations and sediment tests of milk, Certified Milk has proved that it is the only milk amongst the various kinds and qualities generally retailed that can be relied upon all the time as being free from both dirt and tuberculosis. The differences between Certified Milk, Grade A (T.T.) Milk and Grade A Milk were fully explained in the Annual Report for 1927.

The idea still persists amongst the public that milk sold in bottles is all of superior quality. This is quite a fallacy, as non-graded bottled milks differ little from milk delivered from the can, because many of the premises where bottling is carried out are not fitted with proper sterilisers and other necessary appliances.

It is unfortunate that Certified Milk does not gain that growing popularity to which its important advantages entitle it; the reasons apparently being economic and also due to misunderstanding. This is illustrated by an instance which came to the knowledge of the Department. A local retail purveyor of ordinary milk obtained a licence from the Corporation to sell Certified Milk and began to supply a number of mothers who desired this superior milk for their children. To allow himself a halfpenny profit on each bottle he fixed the price at 5d. per pint bottle. At the next house to one of his customers another dairyman regularly delivered a pint bottle of ordinary milk, for which he charged 4d. The two housewives talked, compared the price, and, not having the slightest understanding of the vital difference between the two milks, the housewife who had been getting the Certified Milk soundly rated the first dairyman for "overcharging" her and promptly terminated her custom with him. The outcome of this unfortunate incident was that the retailer supplying the highest quality milk at a small profit lost a customer directly as a result of a commendable effort to supply the best article, whilst a customer was gained in unfair competition by a fellow retailer who bottled ordinary milk and claimed for it advantages which it did not possess. Though it may appear strange, the Department is in possession of evidence to the effect that on occasion a retailer may become registered to sell Certified Milk only to advance the sale of ordinary milk bottled by himself. This will be apparent when it is realised how easy it is to invite customers to inquire

about a high quality article and then offer a lower quality one at a less price, making at the same time extravagant claims as to its supposed virtues. If the sale of Certified Milk is to be advanced it would appear that this can only be brought about by taking the distribution out of the hands of the retailer of ordinary milk and licensing special persons to retail Certified Milk only.

Where milk is sold in bottles the public is advised to request the dealer to shew his license. The cap on the bottle should also be examined to make certain the contents are graded milk produced under licence and not ordinary milk poured into a bottle for trade purposes only. Complaints have been received from time to time respecting certain dealers bottling milk in the streets or on un-registered premises. As pointed out previously, this is an offence against the Milk and Dairies Order.

The names and addresses of persons licensed to sell graded milks in Batley during 1930 are as follows:—

CERTIFIED MILK—

Brooke, William, 72, Town Street, Batley Carr.
 Gray, Bertha, Holly Croft Farm, Upper Batley.
 Haley, George, 15a, Regent Street, Heckmondwike.
 Popplewell, Norman, Owlens Farm, Flushdyke, Ossett.
 Reed, Edgar, 1, Purlwell Lane, Batley.
 Wood, Charles, 48a, Bradford Road C., Batley.

GRADE A (TUBERCULIN TESTED) MILK—

Carlton, David, 52, Cliffe Street, Dewsbury.
 Spen Valley Dairy Co., Savile Town, Dewsbury.
 Robinson, Ida, Church Farm, Birstall.

GRADE A MILK—

Smith, Frank, Navigation House, Ravensthorpe, Dewsbury.
 Squires, Phyllis, 33, Owl Lane, Shaw Cross, Dewsbury.

The following extract from an editorial in the journal, "The Medical Officer," for March 14th, 1931, entitled "Clean Milk," should be read with interest:—

"Three factors dominate the milk question. Dairy farming is one of the chief industries of this country and it is in a bad way. Milk is the most valuable of all articles of food; it is used much less than it should be—in this country less than in any part of the world where it is obtainable. Milk can spread tuberculosis and does do so, and can act as the vehicle of numerous infections;

milk-spread disease is a common phenomenon. How can the last factor be suppressed so as to allow the obvious conclusion from the first two to go ahead to the great benefit of everybody? Our code with its restrictions, which are not safeguards, has not, will not, and cannot do it. Can any code do it? Assuredly, we cannot force people to drink milk by Act of Parliament, but if legislation can enable us to guarantee that milk shall always be food and never poison, we could advise people to drink it, and in time we might almost certainly succeed in raising the consumption to three or four times what it is at present. But while we have the ever-present fear of tuberculosis, the intermittent danger of milk epidemics, the frequent admixture of cow-dung and similar sundries, and the appeal to the cow, which legally allows infants to be starved on dirty water, when it is supposed they are being fed on milk, we are somewhat chary of advertising this 'perfect' food.

"We can get (in some places) practically perfect milk—certified milk—and some think that what can be supplied ought to be supplied, and that certified milk should be the aim of future legislation."

In Batley certified milk has been available for several years, the price being 5d. per pint delivered in winter and 4d. in summer. A large number of the inhabitants realise its safety, and there is a considerable sale for it, largely due to the instruction given at the Clinics and by Health Visitors in the Homes.

Though a number of our local Cowkeepers are prejudiced by buildings of poor general fitness, yet such shortcomings offer no excuse for obsolete methods, carelessness, or even dirty habits. The excellent research work done by the Dairying Sections of Agricultural Colleges has proved that where dairy cows are groomed regularly, flanks, buttocks, udders, maintained free from adhesions of manure, manure removed regularly, premises kept clean; also, where the milkers are particular about their hands, persons and the scrupulous cleanliness of all utensils, clean milk will result preferably by such methods than from the mere state of the construction of buildings; that is, of course, within limits.

Efforts to get dairy farmers to adopt improved methods are often met with scepticism, as many an important detail appears trivial to untrained eyes. For instance, the matter of maintaining milking stools clean seems small, yet when it is remembered that the dairyman whilst milking is constantly handling the stool, and

that if the latter is coated with cow dung, contamination is conveyed via hands to the milk, it becomes clear that attention to the little detail often means the difference between dirt and cleanliness, which is a most serious matter.

If by some happy circumstance all sections of the trade would realise that milk is perhaps the most important of all foods and act in accordance with the high demands of cleanliness and care which its nature merits, the Public Health Department would often be saved the distasteful duty of having to apply pressure.



REPORTS OF THE VETERINARY INSPECTORS.

County Hall, Wakefield,

28th April, 1930.

Dear Sir,

Milk and Dairies Order, 1926.

I beg to inform you that Mr. J. M. McKellar, M.R.C.V.S., D.V.S.M., Assistant Veterinary Officer, has recently made an inspection of the cows on the registered milk producers' premises in your district, accompanied by your Sanitary Inspector, Mr. Hornby.

Mr. McKellar visited 18 farms and examined 257 cows, taking two samples of milk and one of expectorate for bacteriological examination. Although the milk did not show the presence of disease, the sample of expectorate was found to contain tubercle bacilli and the cow concerned, as well as another which was found to be suffering from Pneumonia, was reported to the Borough Authority under the Tuberculosis Order.

With the above exceptions Mr. McKellar reports that the health of the cows was good and their cleanliness satisfactory.

Yours faithfully,

(Signed) D. S. RABAGLIATI,

Chief Veterinary Officer.

To the Medical Officer of Health, Borough of Batley.

Bankfoot House, Batley,
19th May, 1930.

Dr. Pearce, Medical Officer of Health, Batley.

Dear Sir,—I have again the pleasure of submitting a report of my inspection this month of the milk cows in the Borough of Batley. Generally speaking the cows are of good type and the general condition satisfactory.

WEBB.—Sample of milk sent to Laboratory 7th February; informed March 1st positive. Placed the cow under the 1925 Tuberculosis Order, post-mortem proving advanced Tuberculosis.

WILLANS.—March 14th a suspicious udder, visited again on the 21st, then satisfied it was a condition experienced in some newly calven cows, the animal was normal.

TAYLOR.—Placed a cow under the Tuberculosis Order, 1925, on March 14th, post-mortem proving advanced Tuberculosis.

MARRIOTT.—Keeps a better class of cow. A young beast low in flesh due to sickness, should improve with grass.

Red cow indurated quarter (no secretion), not satisfied (clinically) that it is Tuberculosis; will visit later on.

BROWN, J.—Generally speaking this owner's cows look better than in the past.

FOX.—Sample of milk from one cow proved negative.

BURROWS.—An enlarged quarter of udder not tubercular. We have in this case an abnormal teat. After a careful clinical examination I am, from a tubercular point of view, satisfied that up to date no cow showed signs of disease coming within the scope of the 1925 Order.

Owners having calving cows are more anxious as to Retention of Placenta. I have removed a many during these five months. One has experienced some half-dozen deaf quarters of udder (non-secreting).

Yours faithfully,

(Signed) GEO. WHITEHEAD, M.R.C.V.S.

County Hall, Wakefield,
1st August, 1930.

Dear Sir,

Milk and Dairies Order, 1926.

I beg to inform you that on July 17th, 1930, Mr. J. M. McKellar, M.R.C.V.S., D.V.S.M., Assistant Veterinary Officer, made an inspection of the cows on the registered milk producers' premises in your district accompanied by your Sanitary Inspector, Mr. Hornby.

Mr. McKellar visited 18 farms and examined 252 cows. The health of the cows was found to be highly satisfactory; no case of scheduled disease being detected.

It is pleasing to note that the general standard of cleanliness both of the cattle and the premises was found to be good; the only unsatisfactory feature being a great accumulation of manure in one of the farm yards. I understand that instructions were immediately given to have this removed as soon as possible.

Yours faithfully,

(Signed) D. S. RABAGLIATI,
Chief Veterinary Officer.

The Medical Officer of Health, Borough of Batley.

Batley,
December, 1930.

Dr. Pearce, Medical Officer of Health, Batley.

Dear Sir,—I have again the pleasure of submitting a report of my inspection of the milk cows in the Borough.

Generally speaking the cows are of a satisfactory type and the general condition is satisfactory to me. From a tubercular point of view udders satisfactory.

WILLANS.—A white cow reported was suffering from a parasitic or a wasting disease.

BROWN.—A red cow placed under Order, November 21st, and on post-mortem proved an advanced case. This beast was inspected by myself in May last and inspected by a County Inspector latter end of July.

TAYLOR.—As a result of a report that the milk of a roan cow of Taylor's on bacteriological examination proved positive I placed her under the Order, on being slaughtered proved tubercular—

very slight and certainly not advanced Tuberculosis. I was satisfied after a careful examination of carcase and internal organs it was fit for human food. Salvaged £11 6s. 6d.

MARRIOTT.—Red cow named previous report no clinical signs of Tuberculosis and has improved in general condition. This owner is now keeping a much younger cow.

One has experienced during the inspection deaf quarters (no secretion) due probably to a mastitis or injuries to teats.

Yours faithfully,
(Signed) GEORGE WHITEHEAD, M.R.C.V.S.

County Hall, Wakefield,
20th December, 1930.

Dear Sir,

Milk and Dairies Order, 1926.

I beg to inform you that on November 21st Mr. J. M. McKellar, M.R.C.V.S., D.V.S.M., Assistant Veterinary Officer, made an inspection of the cows on the registered milk producers' premises in your Borough, accompanied by your Sanitary Inspector, Mr. Hornby.

Mr. McKellar visited 17 farms, being one less than on the previous inspection, and examined 266 cows, taking two samples of milk for bacteriological examination. In one of these tubercle bacilli were demonstrated microscopically by Mr. McKellar and the other sample proved to be positive to the biological test. The two cows responsible were at once reported to the Borough Authority under the provisions of the Tuberculosis Order.

With these exceptions the health of the cows was found to be good and their general state of cleanliness, with the exception of those on two farms, satisfactory.

It is pleasing to note that four of the least satisfactory cow-sheds in your area have now been altered to comply with the above Order.

Yours faithfully,
(Signed) D. S. RABAGLIATI,
Chief Veterinary Officer.

The Medical Officer of Health, Batley Borough.

(b) MEAT AND OTHER FOODS:—

The following remarks are by the Senior Sanitary Inspector, Mr. H. Hornby:—

The importance given to this section of Public Health work during the past five years has again demanded a great deal of activity on the part of the Department to maintain the high standard of inspection previously achieved and to secure the good quality and wholesomeness of all meat retailed in the Borough.

The work has involved 1,045 visits to slaughter-houses. It may be said with truth that the carcase of every beast and pig, and a very high proportion of sheep and calves slaughtered in the Borough are efficiently inspected prior to sale for human food.

The method of inspection continues to be that laid down by the Ministry of Health in Memo. 62 Foods. The system, when viewed in the light of the many difficulties met with and remembering that it is the one above all others where public and private interests come into conflict, continues to work satisfactorily.

The matter of the Public Health Department and the butchers' organisation, and the question of the Corporation handing over condemned meat to a private interest rather than destroying it, were fully discussed in the Annual Report for 1929.

It will be noted that the amount of meat condemned during 1930 shews an increase of 2,663 lbs. over the corresponding amount for the previous year. This is largely accounted for by the total condemnations in respect of cattle being thirteen for 1930 as against eight for 1929; an increase of five. The question arises as to whether this increase in the amount of unfit meat condemned indicates a fall in some directions as compared with previous years in the quality of animals slaughtered for human food within the Borough, and, if so, an answer is required as to the reason.

There is evidence to support the view that the high proportion of the very best quality meat which formerly was sold in the Borough definitely fell during 1930. Such evidence becomes stronger when it is remembered that less meat than in past years was prepared in the local slaughterhouses, because of the increased amount slaughtered outside the town and imported therein as prepared carcasses or cut-up meat. Thus the results of inspection during 1930 shew increased condemnation for a decreased number of animals slaughtered. It follows, therefore, that quality must have suffered to bring such circumstances about. Further, the reason for the fall in quality would appear to arise from the difficult competitive conditions set up by the sale of meat, often of low quality, not slaughtered and inspected in the town. This

should be a matter of serious concern to the Public Health Committee, for on many occasions suspicious meat has been displayed for sale locally and though the evidence in individual pieces was insufficient to justify seizure, it has been apparent that had the corresponding carcasses and organs been examined at the time of slaughter, unhesitating condemnation would have been the probable verdict. When it is remembered that ordinarily there is no guarantee that dead meat brought into any town from outside its boundaries has been efficiently inspected and passed, it appears overdue that legislation should be passed to compel that such meat should only be brought into a town either on a certificate of soundness or in the form of whole carcasses accompanied by organs. The facts stated cast no reflection on those of our local butchers who, it is well known, retail only best quality bullocks and heifer beef. The noticeable fall in quality is obviously amongst a proportion of the cow butchers in Batley.

The following table, giving particulars of meat condemned, is interesting as shewing the causes of condemnation.

It will be noted that tuberculosis continues to be the greatest cause of condemnation. Of all meat condemned in the beef class, 92 per cent. was due to this disease as compared with 84 per cent. in 1929. This again illustrates what has been said about the fall in quality, for generalised tuberculosis is invariably the cause of the loss of a poor quality cow slaughtered by a butcher. As regards pigs, 92 per cent. of condemnation was due to tuberculosis as compared with 94 per cent. in 1929. The infection in pigs is regarded as almost solely caused by feeding with cows' milk. As to sheep, it will be noted there was no condemnation for tuberculosis and only a small amount for all causes, thus demonstrating the health-giving virtues of the continuous open-air life which these animals lead.

It is worth observing again that the real value the public derives from the proper system of meat inspection is not simply that certain diseased meat is excluded from sale, but that wherever an efficient standard of inspection is practised, the trade exercises an equally high standard of selection in the live animals which it purchases, thus improving quality all round.

H. HORNBY.

SURRENDERS AND SEIZURES OF UNSOUND FOOD, OFFAL, ETC., 1930.

Number of whole carcasses, part of carcasses, organs and offals
condemned as unfit for food :—

	Cattle.	Sheep.	Pigs.	Total.
Whole carcasses, including organs	13	3	4	20
Part carcasses	12	—	3	15
Heads, including tongues	77	—	157	234
Lungs	200	1	73	274
Livers	94	1	71	166
Hearts	4	1	45	50
Spleens	4	1	27	32
Stomachs	2	—	2	4
Udders	5	—	—	5
Diaphragms	12	—	—	12
Mesenteries	25	—	54	79

CAUSES OF CONDEMNATION AND WEIGHT.

Disease.	Cattle. lbs.	Sheep. lbs.	Pigs. lbs.	Total. lbs.
Tuberculosis	16978	—	2830	19808
Distomatosis	631	—	—	631
Cirrhosis	48	2	27	77
Actinomycosis	46	—	—	46
Abscesses	246	—	—	246
Parasitic Cysts	27	8	4	39
Pneumonia	20	—	—	20
Pericarditis	6	—	—	6
Decomposition	464	25	61	550
Moribund	—	—	154	154
Mastitis	13	—	—	13
Suffocation	—	270	—	270
	18479	305	3076	21860

	Tons.	Cwts.	Qrs.	Lbs.
=	10	3	0	23
Sausages and potted meat (Decomposition)		2	1	25
Mussels, rabbits and pork (Decomposition)		2	2	18
Cockles, mussels, halibut, plaice, cod, had-				
dock, herring, hake and finnon		2	3	16
	10	11	0	26

COMPARISON WITH RECENT YEARS.

	Tons.	Cwts.	Qrs.	Lbs.		Tons.	Cwts.	Qrs.	Lbs.
1925 ...	3	6	2	27	1928 ...	9	5	0	7
1926 ...	2	11	3	18	1929 ...	8	12	3	23
1927 ...	9	14	1	5					

(C) ADULTERATION, ETC.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

During the year 94 samples of Foods and Drugs were purchased and submitted to the Public Analyst, who certified 87 samples to be genuine, 1 doubtful, and 6 samples adulterated. Particulars of any administrative action taken in respect of the samples adulterated or doubtful are given in Table II.

Sample No. 82 was the only case of adulteration in respect of which proceedings were taken during the year. In this case the milk was produced on a farm in Lancashire. In evidence the producer stated that water got in the milk through the carelessness of a maid whilst washing out the churns on his premises. As the sample was taken from a 17 gallon churn in which water to the extent of half a gallon had been added to the milk contained therein, it is difficult to believe otherwise than that the employees at the farm were fully aware of the fact that water was present in the churn before the milk for consignment to the Batley retailer was placed in it.

A further comparisons shews that of the 40 milk samples analysed, 4 were adulterated. In addition, 4 other milk samples, though genuine according to the Sale of Milk Regulations, were stated by the Public Analyst to be of poor quality. Compared with 1929, when only one out of 42 milk samples was found adulterated, the number of detections in respect of the sale of inferior milk shewed a definite increase.

This is further demonstrated by Table III, shewing the monthly average composition of milk samples, wherein it appears that the average fat content for the samples purchased throughout the year was 3.58 per cent., as against 3.93 per cent., 3.81 per cent., 3.83 per cent., and 3.80 per cent., respectively, for the four previous years. The tendency of the nutritive qualities of the milk to fall is most serious when the commodity is considered in relation to

its importance as a food for infants and invalids and especially at a period of industrial depression such as obtains at present, when the housewife often does not purchase as generously as ordinary physical demands require. It is interesting that the fall in fat content of the milk should coincide with depressed trade and the reason—if there be any apart from coincidence—forms a problem difficult to solve.

The article of food classified as doubtful was sugar, which was found to contain a small proportion of insoluble organic matter.

Lead in the proportion of 1/25th gr. per pound was found in a sample of lemon cheese, and, similarly, tin to the proportion of 1/3rd gr. per pound in pineapple chunks.

Table IV gives the results of examination of various foods and drinks for preservatives and colouring matters controlled by the Public Health (Preservatives, etc., in Food) Regulations, 1925. The information contained therein is most valuable and interesting, as it fairly demonstrates that the regulations named have been successful in eliminating dangerous preservatives and dyes from the public food supply. Food producers in general are entitled to a word of appreciation for the admirable manner in which they have endeavoured to comply with the law in this respect. On reference to the table it will be seen that, in all, 44 different foods were examined for preservatives. Of this number, 26 are in a class respecting which preservatives are entirely prohibited. In no single case was preservative detected in any of these. As regards the remaining 18 samples, comprising a class in which preservatives are permitted to a small specified degree, 16 contained no preservative whatever, and only 2, i.e., dried fruits, contained sulphur dioxide in quantities well below those permitted by law. In no single case of the 40 milk samples examined was preservative detected. The colouring matters prohibited by the regulations are Metallic Colouring Matters; Compounds of Antimony; Arsenic; Cadmium; Chromium; Copper; Mercury; Lead and Zinc; Gamboge, and certain Coal Tar Colours. In no single instance were any of these dangerous dyes found in the foods examined. These results are, therefore, highly satisfactory.

The following table gives particulars of foods and drugs sampled during the year and results of analysis:—

TABLE I.

Nature of sample.	Manner of Purchase.		Result of analysis.			
	Formal.	In- formal.	Genu- ine.	Adulter- ated.	Doubt ful.	Total.
Milk	38	2	36	4	—	40
Cheese	—	1	1	—	—	1
Butter	—	2	2	—	—	2
Margarine	—	1	1	—	—	1
Potted Meat	—	2	2	—	—	2
Bread	—	1	1	—	—	1
Sausage	—	1	1	—	—	1
Self-raising Flour	—	1	1	—	—	1
Oatmeal	—	1	1	—	—	1
Cornflour	—	1	1	—	—	1
Sago	—	1	1	—	—	1
Rice	—	1	1	—	—	1
Yeast	—	1	1	—	—	1
Treacle	—	1	1	—	—	1
Marmalade	—	1	1	—	—	1
Syrup	—	1	1	—	—	1
Sugar	1	1	1	—	1	2
Canned Peas	—	1	1	—	—	1
Dried apricots	—	1	1	—	—	1
Coffee extract	—	1	1	—	—	1
Raisins	—	1	1	—	—	1
Sauce	—	1	1	—	—	1
Jam	—	1	1	—	—	1
Tea	—	1	1	—	—	1
Sweets	—	1	1	—	—	1
Dried Milk	—	1	1	—	—	1
Tinned Cream	—	1	1	—	—	1
Sultanas	—	1	1	—	—	1
Malt vinegar	—	1	1	—	—	1
Lobster paste	—	1	1	—	—	1
Canned fruit	—	1	1	—	—	1
Lemon cheese	—	1	1	—	—	1
Paregoric	—	1	1	—	—	1
Linseed oil	—	1	1	—	—	1
Gregory powder	—	1	1	—	—	1
Lard	—	1	1	—	—	1
Pure coffee	—	1	1	—	—	1
Candied peel	—	1	1	—	—	1
Pepper	—	1	1	—	—	1
Custard powder	—	1	1	—	—	1
Canned tomatoes	—	1	1	—	—	1
Lemonade crystals	—	1	1	—	—	1
Ammoniated tincture of quinine	—	1	1	—	—	1
Ham	—	1	1	—	—	1
Bacon	—	1	1	—	—	1
Cake	—	1	1	—	—	1
Honey	—	1	1	—	—	1
Ammoniated Quinine Tablets ...	—	1	1	—	—	1
Glycerine	—	1	1	—	—	1
Lime juice and soda	1	1	—	2	—	2
Cider	—	1	1	—	—	1
Totals	40	54	87	6	1	94

TABLE II.

Administrative Action Taken in Respect of Samples Reported
by the Public Analyst to be Not Genuine.

Sample No.	Nature of sample and result of analysis.	Remarks.
8	Milk—Fat 2.80% Solids not fat 8.92%	Reported to Public Health Committee, who decided to recommend that legal proceedings be taken against the vendor, but later withdrew this decision. No action taken.
13 & 26	Lime juice and soda. Article contained no lime juice.	Reported to Public Health Committee, who recommended the Town Council to institute legal proceedings against the vendor. Town Council rejected the recommendation and referred the matter back to the Public Health Committee. No action taken.
19	Sugar. Contained .28% insoluble organic matter.	Reported to Public Health Committee. Town Clerk forwarded warning letter to vendor.
56	Milk—Fat 2.90% Solids not fat 8.94%	Reported to Public Health Committee. No action taken.
80	Milk—Fat 2.76% Solids not fat 9.24%	Same vendor as No. 8. Reported to Public Health Committee, before whom vendor appeared and was given a warning.
82	Milk—Milk 96.5% Added water 3.5%	Reported to Public Health Committee. Proceedings taken against vendor. Case proved; defendant fined 20/- and ordered to pay analyst's fee.

TABLE IV.

Articles of Food examined for Preservative in accordance with the Public Health (Preservatives, etc., in Food) Regulations, 1925.

Food.	No. of samples examined.	Nature of Preservative.	Amount.		Remarks.
			Allowed.	Found.	
Milk	40	—	Nil.	Nil.	
Cornflour	1	Sulphur dioxide	100 parts per million.	Nil.	
Sauce	1	Benzoic acid	250 parts per million.	Nil.	
Butter	2	—	Nil.	Nil.	
Margarine	1	—	Nil.	Nil.	
Jam	1	Sulphur dioxide	40 parts per million.	Nil.	
Marmalade	1	Sulphur dioxide	40 parts per million.	Nil.	
Syrup	1	Sulphur dioxide	70 parts per million.	Nil.	
Canned peas	1	—	Nil.	Nil.	No copper sulphate.
Dried Apricots	1	Sulphur dioxide	2000 parts per million	659 parts per million.	
Cider	1	Sulphur dioxide	200 parts per million.	Nil.	
Raisins	1	Sulphur dioxide	750 parts per million.	341 parts per million.	
Sweetened mineral water	1	Sulphur dioxide or Benzoic acid	70 parts per million.	Nil.	No prohibited colouring matter.
Sugar	2	Sulphur dioxide	450 parts per million.	Nil.	
Coffee extract	1	Benzoic acid	Nil.	Nil.	
Tea	1	In sugar Sulphur dioxide	70 parts per million.	Nil.	No prohibited colouring matter.
Sweets	1	—	Nil.	Nil.	No prohibited colouring matter.
Dried milk	1	—	70 parts per million.	Nil.	
Malt	1	—	Nil.	Nil.	
Vinegar	1	—	Nil.	Nil.	No prohibited colouring matter.
Lobster paste	1	—	Nil.	Nil.	
Canned fruit	1	Sulphur dioxide	350 parts per million.	Nil.	
Lemon	1	—	Nil.	Nil.	
Cheese	1	Sulphur dioxide	70 parts per million.	Nil.	
Black treacle	1	—	Nil.	Nil.	
Lard	1	—	Nil.	Nil.	
Oatmeal	1	—	Nil.	Nil.	
Cheese	1	—	Nil.	Nil.	
Sago	1	—	Nil.	Nil.	
Candied Peel	1	Sulphur dioxide	100 parts per million.	Nil.	No prohibited colouring matter.
Custard	1	—	Nil.	Nil.	
Powder	1	Sulphur Dioxide	350 parts per million.	Nil.	
Canned tomatoes	1	—	Nil.	Nil.	
Bread	1	Sulphur Dioxide.	450 parts per million.	Nil.	
Sausage	1	—	Nil.	Nil.	
Pure coffee	1	—	Nil.	Nil.	
Self-raising flour	1	—	Nil.	Nil.	
Rice	1	—	Nil.	Nil.	
Yeast	1	—	Nil.	Nil.	
Lemonade Crystals	1	—	Nil.	Nil.	A little saltpetre was found.
Ham	1	—	Nil.	Nil.	No prohibited colouring matter.
Bacon	1	—	Nil.	Nil.	
Cake	1	—	Nil.	Nil.	
Honey	1	—	Nil.	Nil.	
Potted Meat	1	—	Nil.	Nil.	
Tinned cream	2	—	Nil.	Nil.	
Sultanas	1	Sulphur Dioxide.	750 parts per million.	Nil.	
	1			Nil.	

TABLE III.
Monthly Average Composition of Milk Samples.

Month.	No. of Samples.	Analytical Data.	
		Milk Fat, per cent	Non-fatty solids per cent.
January	10	3.45	9.06
February	—	—	—
March	—	—	—
April	9	3.74	8.97
May	—	—	—
June	5	3.58	9.00
July	7	3.34	8.91
August	—	—	—
September	—	—	—
October	4	3.45	8.82
November	5	3.97	8.94
December	—	—	—
Average for the year 1930		3.58	8.97
Average for the year 1929		3.93	9.01
Average for the year 1928		3.81	8.96
Average for the year 1927		3.83	8.98
Average for the year 1926		3.80	8.97
Requirements of the Sale of Milk Regulations, 1901		3.00	8.50

The following extract from a letter received by Mr. Hornby from an Inspector of the West Riding County Council has a local interest:—

“ I also obtained a sample from a churn containing 8 gallons of milk which was waiting to be taken to Batley Hospital.

“ The result of the analysis of this sample is as follows:—

Total Solids 11.50% Fat 2.7%

Solids not fat 8.80% Ash 72%

This sample contained only 90% of the minimum proportion of Fat.”

The Medical Officer of Health for Batley immediately sent a copy of these particulars to the House Surgeon at the Batley Hospital, but no acknowledgment was ever received.

(d) CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD has not been specially required during the year otherwise than for milk. Bacteriological examinations of certified milk have been made monthly by the Clinical Research Association at the request of the Ministry of Health. Ordinary chemical examinations of food samples have been made as usual by the analyst who usually does this work. The West Riding County Council laboratory is also available, if necessary.

(e) NUTRITION.—For many years the department, through the agency of Health Visitors, School Nurses and otherwise, has advised parents in respect of suitable diets having regard to adequacy from the health aspect and with due regard to economy in the financial sense. Nearly twenty years since I advocated instruction in the elementary schools to all scholars in this subject. The publication "Better Health" previously mentioned is an excellent means for disseminating suitable knowledge, but unfortunately the Corporation has not yet adopted this view. In too many homes tea with bread and margarine is largely the principal diet, and it is very difficult to persuade adults to alter their mode of life in this direction. Fresh fruit, green vegetables, pure milk are still largely absent from many diets, and much money is wasted by householders in purchasing food which is of little real value. In my opinion a large amount of illness and suffering is caused through wrong feeding, and here lies an important avenue through which the health of many in this town might be considerably improved if the advice at present available was made use of, even to a small degree.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

SMALLPOX.—This disease, which had been prevalent in Batley since March, 1927, was last notified on July 7th, 1930. During that year 43 cases were notified, making a total of 163 in all during the three years and four months the epidemic lasted. The type, generally speaking, was mild, and differed in no way from the descriptions given in the annual reports since 1927. No death occurred.

This district has been renowned for many years as being strongly opposed to vaccination. It was noteworthy that when residents realised the protection afforded by vaccination many revised their previous convictions and sought this, the only protection, for themselves. When it was demonstrated that those members of families who were previously vaccinated or re-vaccinated within at least ten years did not become infected, although the disease attacked other inmates of the same family living together, their abuse of vaccination was changed in some cases to silence and in others to advocacy. In accordance with the provisions of the Public Health (Smallpox Prevention) Regulations, 1917, the Medical Officer of Health did 136 primary and 164 re-vaccinations of con-

NOTIFIABLE DISEASES DURING THE YEAR 1930.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								Total cases notified in each locality (e.g. Parish or Ward) of the District				Total Cases Removed to Hospital.					
	At Ages.. Years								1 North Ward	2 East Ward	3 West Ward	4 South Ward	1930	1929	1928	1927	1926	1916 to 1925
	At all ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards										
Small-pox...	43	...	1	15	11	7	9	...	18	11	11	3	43	75	35	5	...	...
Cholera (C) Plague (P)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Group)	39	...	5	24	5	5	...	...	4	23	3	9	37	14	11	17	21	339
Erysipelas	12	...	...	...	1	3	5	...	4	1	4	3	...	...	...	...	...	1
Scarlet Fever	75	1	22	46	5	1	...	...	20	12	30	13	70	95	60	38	28	466
Scarlet Fever and Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	3	...	...	...	1	1	1	...	1	2	...	...	3	1	...	1	...	50
Para Typhoid (B)	...	...	...	...	...	...	...	...	...	...	...	...	...	6	4	...	1	1
Pneumonia	17	1	5	3	1	3	3	1	6	4	3	4	4	5	16	5	5	31
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaria ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
Puerperal Pyrexia ...	4	...	...	...	3	1	...	...	3	1	...	...	...	1	1	1	2	3
Cerebro-Spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio myelitis	1	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1
Ophthalmia Neonatorum	3	...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	2	13
*Pulmonary Tuberculosis	27	...	1	5	9	6	5	1	12	7	7	1	13	24	32	32	35	406
†Other Forms of "	7	1	1	1	2	...	1	...	2	4	1	...	3	3	6	7	5	29
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox	6	...	...	6	...	...	...	...	...	3	...	...	...	...	...	...	...	...
Totals	238	6	36	100	38	28	24	6	71	70	64	33	176	226	166	107	99	1341

* Males 13, Females 14. + Males 2, Females 5. Total deaths from all notified Infectious Diseases, 22.

The Zymotic Death-rate for 1930 was 0.17 per 1,000 of the population.

Analysis of total Deaths from Notified Infectious Diseases under Age Groups.

	Under 1 year	1-2 years.	2-3 years	3-4 years.	4-5 years.	5-10 years	10-15 years.	15-20 years.	20-35 years.	35-45 years.	45-65 years.	65 and over.
Enteric Fever	...	...	...	...	...	...	...	1	...	...	1	...
Diphtheria	...	1	...	1	1	...	...	1	...	...	...	...
Pneumonia	1	...	...	...	...	...	...	...	...	...	...	1
Pulmonary Tuberculosis	...	...	...	...	...	...	...	2	4	...	6	1
Other forms of Tuberculosis	...	...	...	...	1	...	...	...	...	...	...	...

CASES OF INFECTIOUS DISEASES NOTIFIED DURING

THE 40 YEARS, 1890-1929.

YEARLY AVERAGES.

	1890 to 1899.	1900 to 1909.	1910 to 1919.	1920 to 1929.
*Measles	...	...	142.7	...
Smallpox	56.1	19.1	0.8	11.5
Diphtheria	51.8	29.6	56.3	20.4
Erysipelas	37.3	12.8	15.9	11.0
Scarlet Fever	93.8	90.7	50.3	60.4
Scarlet Fever & Diphtheria	...	...	...	0.3
Enteric Fever	64.6	46.9	15.2	3.4
Paratyphoid Fever	...	...	...	1.4
Pneumonia	...	...	67.0	35.8
Malaria	...	...	12.0	0.2
Dysentery	...	...	...	0.1
Car. forward	303.6	199.1	360.2	144.5
1890 to 1929	306.3	200.6	489.9	214.7

Brt. forward 303.6 199.1 360.2 144.5
Continued Fever -- 0.1 0.1
Puerperal Fever 2.7 1.5 1.6 0.7
Pyrexia -- 1.0
Cerebro Spinal
Meningitis -- 0.1 0.1
Polioomyelitis -- 0.4 0.1
Ophthalmia
Neonatorum -- 11.3 3.9
Pulmonary
Tuberculosis -- 85.0 48.5
Other forms of
Tuberculosis -- 31.2 13.1
Encephalitis
Lethargica -- 0.4
Chickenpox ... 2.3

* Measles was notifiable from 1916 to 1919.

tacts. The same difficulties described in previous years were encountered when endeavouring to trace the source of infection and limit its spread. It became almost the rule for the majority of answers to questions given by householders to be false, and although in some instances assistance was willingly given, in the majority obstruction was encountered through refusal to divulge the movements of the patients or themselves previous to the onset of smallpox.

One householder was prosecuted and convicted for exposing his children when suffering from smallpox. No doctor had been called, and when the acute symptoms subsided he sent the children when still infectious to school, where another scholar developed the disease.

The epidemic was the cause of the expenditure of a large sum of money, out of proportion to the number of cases and type of disease. In a well vaccinated area it would never have happened. It would seem worth while, therefore, if attention could be given to the great cost of fighting these epidemics of smallpox when it is the one disease of all others which can be so easily prevented.

The cost of sending messages from the Medical Officer of Health to the Sanitary Inspectors after office hours, Sundays, and holidays, and vice versa, by telegram or through the agency of taxicabs must have been very considerable. The refusal of the Corporation to permit the Senior Sanitary Inspector's house to be connected to the telephone system has been previously mentioned back to pre-war days.

The following facts relating to work done by the sanitary inspectors in fighting the outbreak of smallpox which extended, with remissions, for three years and four months, are worthy of consideration. Two thousand eight hundred and fifty-five contacts were kept under observation, twenty-seven thousand nine hundred and forty-nine visits were made, and twenty-eight weeks' overtime entirely on smallpox duties were worked. In addition the ordinary routine of the department was kept going.

On the ground that this large increase involved systematic overtime the inspectors asked for financial recompense on three occasions. The applications were refused.

The Medical Officer of Health wishes to place on record his appreciation of the great assistance rendered to him by the Sanitary Inspectors during this trying period. Without their willing co-operation his efforts would have been severely handicapped. On more than one occasion their knowledge and activity resulted in cases of Smallpox being seen by him which would otherwise

have been unknown and, therefore, would have acted as further foci of infection and expense. Although only of sentimental value it is certain some expression of appreciation of their services, apart altogether from money, would have acted as an encouragement had such been forthcoming.

DIPHTHERIA was notified on 39 occasions. There were no return cases, but four deaths. Antitoxin is provided by the Corporation to practitioners free upon request. 98,000 units were thus distributed during the year. Antitoxin is generally used after admission to hospital, practitioners not, as a rule, administering this themselves. The presumption is that prompt removal to hospital after notification being the rule, they are of opinion this is sufficient. Of the 98,000 units mentioned 24,000 were used for notified cases only.

ERYSIPELAS was notified twelve times. No special comment is called for.

SCARLET FEVER was notified 75 times, which is a diminution when compared with the figures for the previous year (101). The type of disease still remained mild, although several patients were more severely affected than usual. There was only one return case.

No relation was observed between cases of scarlet fever and puerperal fever, but it is interesting to record that on October 26th, 1930, a nurse midwife commenced duty in the Maternity Home. Seven days afterwards she developed Scarlet Fever and was immediately removed to the Isolation Hospital from where she was discharged on December 31st, 1930. After a fortnight's interval she resumed duty in the Maternity Home being apparently perfectly well and free from possible sources of infection. A careful watch has been maintained, but after an interval of eight weeks nothing abnormal has been detected in either nurse or patients in the Home. The resumption of duty by this nurse has been a source of no little anxiety to the Medical Superintendent, but there appeared to be no sufficient ground for preventing her return, and happily all has turned out well.

ENTERIC FEVER.—Three cases were notified, the first as Diphtheria, but on admission to hospital the practitioner's diagnosis was found to be erroneous. The patient suffered from Enteric Fever and recovered. He was aged 16, employed as a labourer in a mill. The source of infection was never satisfactorily traced. The second case was a female aged 52. Notification

was received thirteen days after the onset of illness the 'practitioner in attendance making an urgent request for immediate removal to Hospital. No Widal examination had been made. The patient died three days after admission. No probable source of infection could be traced, and the diagnosis was never confirmed. The third case was that of a married woman aged 27. The onset was August 10th and the notification was received August 27th. The house was subject to periodical flooding during heavy rain, and on further examination the whole drainage system of this and adjoining houses was found to be defective, sewage being discovered under the floors. Entire reconstruction of the drains was carried out, and this property rendered safe for occupation. It is pleasing to record that in this instance the agent for the property rendered every assistance possible. The cost of the work was approximately £150, although the property was offered for sale at £370. The Inspector was thanked by the agent when the work was completed for having pointed out the defects, which involved less administrative difficulty in remedying than not infrequently occurs when, after weeks of argument, some trifling repair or renewal is effected grudgingly and abuse is heaped upon the Inspector thereafter for having done his duty.

PNEUMONIA was notified seventeen times. The regulations respecting the notification of this disease are largely ignored by practitioners. As an illustration it may be mentioned that twenty deaths were certified as due to pneumonia during 1930, and in a town of this size there would obviously be many cases which did not prove fatal. Four of the notified cases were removed to hospital, but it is customary for patients and their relatives to be hostile when hospital treatment is suggested.

PUERPERAL FEVER was notified from Batley Hospital, the patient being an inmate there at the time. Four cases of PUERPERAL PYREXIA were notified, the patients being resident in their own homes.

ACUTE ANTERIOR POLIOMYELITIS was the cause of one notification. The patient was aged four years, removed to hospital, and remained there for a lengthy period. On discharge there was extensive paralysis of limbs.

The Medical Officer of Health not being the Medical Superintendent of the Infectious Diseases Hospitals—which are in charge of general practitioners—is not able to give the information required on page 10 of the Ministry's Circular 1119 (England).

Use has not been made of the Schick and Dick tests in Diphtheria and Scarlet Fever respectively, or of the artificial methods of immunisation against these diseases, public opinion being unfavourable, as would be expected in an area which has been strongly opposed to vaccination and "inoculation" for many years.

INFLUENZA was stated to be prevalent to a comparatively minor degree in the Spring, but actually there were few if any cases of true influenza, the term being loosely employed to cover the existence of cases of catarrhal colds, bronchial catarrh and similar conditions.

PATHOLOGICAL and BACTERIOLOGICAL facilities are provided at the County Council Laboratories, Wakefield, for the examination of pathological and bacteriological specimens. The figures for the year 1930 are Widal 12, Sputa 37, Diphtheria 141, Miscellaneous 26; a total of 216.

NON-NOTIFIABLE ACUTE INFECTIOUS DISEASES become known to the department principally through the agency of Teachers, Health Visitors, School Nurses, School Attendance Officer, Parents, etc. During 1930 Head Teachers notified 311 and the School Attendance Officer 69 cases.

The average weekly number of scholars excluded either as patients or contacts during the year for notifiable or non-notifiable diseases was :—

Scarlet Fever	12.8	Mumps	0.86
Diphtheria	4.6	Ringworm	0.93
Para Typhoid Fever ...	Nil.	Impetigo	0.39
Measles	20.8	Contagious Ophthalmia	Nil.
Whooping Cough	4.07	Scabies and Itch	0.23
Chickenpox	25.05	Verminous Conditions ...	2.6
Smallpox	3.5		

No locally contracted case of ANTHRAX or RABIES was notified during the year. No compulsory cleansing of VERMINOUS PERSONS was resorted to, but many scholars were cleansed from vermin by their parents under threat of prosecution. The cleansing and disinfecting station was frequently used to deal with smallpox contacts.

During the autumn the usual measures in connection with Rat Week were taken as described in previous Annual Reports.

YEAR 1930.

Table shewing relationship between Domestic Conditions of persons under 15, and incidence of Notifiable Disease.

Notifiable disease.	Less than 1 person per room.		1 to 2 persons per room.		More than 2 persons per room.	
	Previously attacked.	Not previously attacked.	Previously attacked.	Not previously attacked.	Previously attacked.	Not previously attacked.
Diphtheria (including Membranous Croup)	...	3	...	18	...	8
Erysipelas	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...
Pneumonia	...	...	...	5	...	4
Ophthalmia Neonatorum	...	...	...	...	...	...
Pulmonary Tuberculosis	...	...	...	3	...	3
Other forms of Tuberculosis	...	1	...	1	...	1
Smallpox	...	1	...	4	...	3
Para Typhoid Fever (B)	...	...	...	...	...	...
Chickenpox	...	...	...	3	...	3
Acute Poliomyelitis	...	...	...	1	...	...

YEAR 1930.

Attack rates per 1,000 persons under 15 not known to have had a previous attack.

Notifiable Disease.	Less than 1 person per room.	1 to 2 persons per room.	More than 2 persons per room.
Diphtheria (including Membranous Croup)	0.08	0.52	0.23
Erysipelas	...	...	...
Scarlet Fever	...	...	...
Enteric Fever	...	...	...
Pneumonia	...	0.14	0.11
Ophthalmia Neonatorum	...	...	...
Pulmonary Tuberculosis	...	0.08	0.08
Other forms of Tuberculosis	0.03	0.03	0.03
Smallpox	0.03	0.11	0.08
Para Typhoid (B)	...	...	...
Chickenpox	...	0.08	0.08
Acute Poliomyelitis	...	0.03	...

DISINFECTION, 1930.

The following table shows the number of disinfections during the year :—

	Beds	Pillows	Cushions	Blankets	Mat- tresses	Sheets	Quilts	Wearing Apparel	Carpets	Miscell. Articles	Totals
Destroyed for the Borough	3	..	..	..	2	..	..	..	..	..	5
Destroyed for others out- side the Borough ..	..	..	..	..	..	..	..	..	..	..	..
Disinfected for the Borough	301	744	40	1025	8	204	333	1901	33	301	4890
Disinfected for others out- side the Borough ..	90	225	63	296	2	110	109	2039	215	682	3831
Disinfected for the Batley and District Hospital	95	242	..	92	..	19	7	15	..	42	512
Totals ..	489	1211	103	1413	12	333	449	3955	248	1025	9238

Number of houses disinfected, 68 ; number of rooms disinfected, 68 ; number of times apparatus charged, 872 ; number of library, etc., books, disinfected, 230.

PREVENTION OF BLINDNESS.

No action has been taken under Sec. 66 Public Health Act, 1925, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes, the local facilities appearing to be sufficient.

OPHTHALMIA NEONATORUM, 1930.

Year.	CASES.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Death
	Notified	Treated.					
		At Home.	In Hospital.				
1930	3	...	3	2			

One of the above-mentioned infants was born in Batley Hospital. The parents resided outside Batley and particulars were unobtainable.

TUBERCULOSIS IN BATLEY, 1930.

Age Periods.	NEW CASES.				DEATHS.			
	Pulmonary		Non Pulmonary		Pulmonary		Non Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	...	...	...	1	..	...	...	..
1	1	...	1	...	...	...	1	...
5	2	1	...	1	...	...	1	...
10	1	1	...	...	...	...	...	...
15	2	2	1	1	1	1	...	...
20	...	5	...	...	...	...	...	...
25	1	2	...	...	1	3	...	...
35	1	2	...	...	...	...	..	...
45	5	...	...	1	4	1	...	...
55	...	...	...	...	...	1	...	...
65 & upwards	...	1	...	1	1	...	.	...
Totals	13	14	2	5	7	6	2	...

Housing conditions of patients notified to be suffering from Pulmonary Tuberculosis during the twelve years 1919 to 1930 were as follows:—

Years	Notifica- tions		Type of House		Occupants,									Houses with more than one Patient Notified	Rooms.					Bedrooms.				Sleeping Accommodation for Patients.				
	M.	F.	B. to B.	Single	Through	1	2	3	4	5	6	7	8	9 and over	1	2	3	4	5	6 and over	1	2	3	4 and over	Separate Room.	Shared Room.	Separate Bed	Shared Bed
1919 to 1930 (inclusive)	318	241	275	141	154	249	117	110	108	65	46	22	41	78	30	181	180	96	55	28	204	271	79	15	131	443	273	301
Year 1930	13	14	11	6	7	2	3	4	3	4	1	3	1	4	2	6	11	2	2	1	7	12	5	—	9	15	17	7

The above figures give an insight into the way many persons in Batley are spending their lives, the conditions not being confined to tuberculosis patients only. The table has been previously published in former years, but has never excited any comment. This appears remarkable. In view of the passing of the Housing Act, 1930, the table furnishes information bearing upon this Act and the special Report of the Medical Officer of Health in relation thereto.

1930. Particulars not available in three cases.

The relationship between notification of tuberculosis and deaths from the disease is shown in the following table, which covers the period between January 1st, 1913, and December 31st, 1930:—

Death before notification ...	91	Death 6 months after	15
Death 1 month, or under		Death 7 months after	12
after notification	147	Death 8 months after	8
Death 2 months after	43	Death 9 months after	6
Death 3 months after	26	Death 10 months after	3
Death 4 months after	15	Death 11 months after	6
Death 5 months after	15	Death 12 months and over... ..	105

The ratio of non-notified tuberculosis deaths to total tuberculosis deaths during 1930 was 1 to 15, or 6.6 per cent.

The Regulations respecting the notification of Tuberculosis are largely ignored.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

No action was taken or called for under these Regulations during 1930.

PUBLIC HEALTH ACT, 1925, SECTION 62.

This section refers to the compulsory removal to hospital of infectious persons suffering from pulmonary tuberculosis. It is similar to Section 138 of the Batley Corporation Act, 1921. The West Riding County Council is the authority responsible for the provision of hospital accommodation for persons suffering from tuberculosis. There are many cases where such is very desirable, though not provided, partly because there are not sufficient beds available, and partly because tubercular patients often refuse hospital treatment. No action was taken under this section.

The adoptive portions of this Act were recommended to the Sanitary Committee by the Medical Officer of Health for adoption by the Town Council at a meeting of that Committee on September 22nd, 1926. The recommendation is again made.

G. H. PEARCE, M.D., D.P.H.,
Medical Officer of Health.

Medical Officer's Department, Batley,
April, 1931.

